374

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February 9, 1943

Trade-Marks	108—No.	399,928 to No. 400,035, inclusive.
T. M. Renewals	73	
Reissues	3—No.	22,263 to No. 22,265, inclusive.
Patents	718—No.	2,310,199 to No. 2,310,916, inclusive.
Designs	49—No.	134,975 to No. 135,023, inclusive.
Total	951	

Notices of Cancellation

U. S. Patent Office, *Richmond, Va., Jan. 11, 1943.*

George Booskos, his assigns or legal representatives, take notice:

An application for cancellation having been filed in this Office by Riverbank Canning Company, Riverbank, Calif., to effect the cancellation of trade-mark registration of George Booskos, 2219 First Ave., New York, N. Y., No. 221,110, dated November 23, 1926, and the notice of such proceeding sent by registered mail to the said George Booskos at the said address having been returned by the post office undeliverable, notice is hereby given that unless said George Booskos, his assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the cancellation will be proceeded with as in the case of default. This notice will be published in the Official Gazette for three consecutive weeks.

LESLIE FRAZER,
First Assistant Commissioner.

U. S. Patent Office, *Richmond, Va., January 20, 1943.*

Chin Yuk Sun, his assigns or legal representatives take notice:

A petition for cancellation having been filed in this Office by James L. Younghusband, 30 W. Hubbard St., Chicago, Ill., to effect the cancellation of trade-mark registration of Chin Yuk Sun, 40 Bowery, New York, N. Y., No. 300,933, dated February 14, 1933, and the notice of such proceeding sent by registered mail to the said Chin Yuk Sun at the said address having been returned by the post office undeliverable, notice is hereby given that unless said Chin Yuk Sun, his assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the cancellation will be proceeded with as in the case of default. This notice will be published in the Official Gazette for three consecutive weeks.

LESLIE FRAZER,
First Assistant Commissioner.

Transfer of Class

Order No. 3,689

U. S. Patent Office, *Richmond, Va., Jan. 20, 1943.*

The following transfer to take effect February 1, 1943, is hereby ordered:

Class 99, Foods and Beverages, subclasses 234 to 278 inclusive, from Division 63 to Division 1.

CONWAY P. COE,
Commissioner.

Transfer of Classes

Order No. 3,690

U. S. Patent Office, *Richmond, Va., Jan. 25, 1943.*

The following transfers to take effect February 8, 1943, are hereby ordered:

Class 25, Plastic Block and Earthenware Apparatus from Division 15 to Division 33.

Class 260, Chemistry, Carbon Compounds, Subclasses 97 to 111 inclusive; 209 to 235 inclusive; and 774 to 813 inclusive, from Division 50 to Division 15.

Class 260, Chemistry, Carbon Compounds, Subclasses 112 to 123 inclusive, from Division 63 to Division 15.

Class 21, Preserving, Disinfecting, and Sterilizing, from Division 63 to Division 44.

CONWAY P. COE,
Commissioner.

Erratum

Page 1 of the Official Gazette of January 5, 1943, second column, lines 9, 10, and 11, for "Holden reissue patent, No. 21,240, for manufacture of sensitized photographic printing paper and cloth" read *Pratt reissue patent, No. 21,420, for radio apparatus.*

Condition of Applications Under Examination at Close of Business January 23, 1943

(Total number of applications awaiting action, excluding Trade-Mark Division, 41,225; Trade-Mark Division, 848. Oldest new case, Mar. 9, 1942; oldest amended, Mar. 2, 1942.)
(The dates given are 1942 except where † indicates 1943)

Divisions, Examiners, and Subjects of Inventions	Oldest new application and oldest action by applicant awaiting office action: New	Amended	No. of applications awaiting action
1. TUCKER, M. W., Closure Operators; Fences; Gates; Tillage; Scattering Unloaders; Baths, Closets, Sinks, and Spittoons; Domestic Cooking Vessels; Sewerage.	Aug. 10	Sept. 11	409
2. HERRMANN, D., Fishing and Trapping; Bee Culture; Dairy; Animal Husbandry; Presses; Tobacco; Textile Wringers; Butchering.	Aug. 21	Aug. 11	302
3. WOLFFE, S., Heating; Metal Founding; Metallurgy; Metal Treatment; Electric Furnaces	Mar. 14	Mar. 13	1022
4. BISHOP, WALTER C., Conveyors; Hoists; Handling Apparatus; Excavating; Elevators; Fire Escapes; Ladders; Scaffolds; Pneumatic Dispatch; Store Service; Mining, Quarrying and Ice Harvesting.	July 21	Aug. 31	412
5. ROBINSON, C. W., Harvesters; Music; Acoustics; Sound Recording; Knotters; Buckles, Buttons, Clasps	June 10	May 30	555
6. GENIESSE, E. W., Carbon Chemistry (part)	May 1	May 2	1083
7. JARBOE, C. G., Optics, Photography	May 30	June 5	1037
8. ADAMS, F. L., Furniture; Kitchen and Table Articles; Racks and Cabinets	July 13	July 10	692
9. BENSON, R. B., Pumps and Fans; Fluid and Fluid-Current Motors	July 20	July 21	682
11. BENHAM, E. V., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus; Hides, Skins, and Leather.	Sept. 1	Aug. 31	363
12. SPINTMAN, S., Machine Elements (part); Engine Starters; Stop Mechanisms	Aug. 15	Aug. 12	331
13. DONNELLY, A. E., Metal Working (part); Gear Cutting, Milling and Planing; Needle and Pin Making	June 24	June 16	660
14. HANLIN, GEORGE, Metal Working (part); Farriery; Wire Fabrics	Sept. 15	Sept. 15	406
15. HENKIN, BENJ., Glass, Plastic Block and Earthenware Apparatus; Plastics	June 13	June 20	514
16. SPENCER, C. J., Telegraphy; Telephony	May 27	June 8	699
17. HABECKER, LEON B., Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Apr. 9	Mar. 24	715
18. KURZ, J. A., Motors, Expansible-Chamber Type; Power Plants; Speed Responsive Devices; Rotary Internal Combustion Engines.	June 13	May 11	622
19. PATRICK, P. L., Liquid and Gaseous Fuel Burners; Stoves and Furnaces	May 14	May 5	688
20. BROWN, L. M., Miscellaneous Hardware; Closure Fasteners; Locks; Safes; Undertaking; Bread, Pastry, and Confection Making; Laminated Fabrics (part).	May 4	June 19	452
21. THOMPSON, T. J., Textiles	Sept. 5	Sept. 4	337
22. RINGLE, D., Aeronautics; Firearms; Ordnance and Explosive Devices	Apr. 21	Apr. 21	1691
23. BARROWS, B., Cash Registers; Calculators (part)	Aug. 6	June 26	118
24. LUSBY, CHARLES, Apparel; Apparel Apparatus; Sewing Machines	Aug. 11	Aug. 11	687
25. BLAKELY, C. F., Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	May 27	June 3	522
26. YOUNG, R. R., Electricity—Generation and Motive Power	June 22	June 5	465
27. CLARK, W. N., Brush, Broom, and Mop Making; Brushing, Scrubbing and General Cleaning; Textiles, Fluid Treating Apparatus; Ironing; Washing Apparatus.	June 11	May 23	619
28. SOLYOM, H. L., Internal-Combustion Engines (part); Cylinders and Pistons	May 25	Apr. 11	516
29. SHKLARIN, J. B., Baggage; Cloth, Leather, and Rubber Receptacles; Button Making; Package and Article Carriers; Woodworking; Tools; Metal Working, Assembling.	Sept. 19	Sept. 17	363
30. McCANN, LEO P., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	Oct. 8	Sept. 26	345
31. DUNCOMBE, C. S., Hydrocarbons; Mineral Oils	Aug. 3	Aug. 1	1322
32. LESH, K., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation; Agitating; Wells; Earth Boring.	July 24	July 24	673
33. HULL, J. S., Bridges; Hydraulic and Earth Engineering; Building Structures; Roads and Pavements	Sept. 2	Aug. 29	538
34. SAPERSTEIN, S., Electricity—Meters and Transmission to Vehicles; Railways; Track Sanders; Signals and Indicators.	July 30	Aug. 18	321
35. BROMLEY, E. D., Card and Sign Exhibiting; Dispensing; Filling and Closing Portable Receptacles	July 1	June 22	768
36. McFADYEN, A. D., Automatic Weighers; Measuring and Testing; Force Measuring	May 25	June 18	467
37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Sept. 1	Sept. 30	571
38. KRAFFT, C. F., Coating Processes; Coating or Plastic Compositions (part)	July 15	June 11	670
39. WHITNEY, F. I., Fluid-Pressure Regulators; Valves; Water Distribution	Oct. 1	Aug. 26	269
40. DRUMMOND, E. J., Receptacles	July 29	July 31	553
41. HERTZ, M., Coin Handling; Recorders; Deposit Receptacles; Counters and Calculators (part); Typewriting Machines; Check-Controlled Apparatus.	July 10	July 16	454
42. MARANS, H., Electric Signaling	July 31	Aug. 3	371
43. FEDERICO, P. J., Medicines and Cosmetics; Bleaching and Dyeing; Explosive Compositions; Sugar and Starch; Fluid Treatment of Textiles; Azo Compounds.	Mar. 9	Mar. 9	1009
44. HARVEY, L. P., Refrigeration	June 5	June 13	370
45. HILL, H. D., Shafting and Flexible Shaft Couplings; Wheels and Axles; Resilient Tires and Wheels; Lubrication; Bearings and Guides; Motors; Belt and Sprocket Gearing; Spring Devices; Metal Forging and Welding; Land Vehicles (part).	July 20	Aug. 5	727
46. BLEECKER, V. E., Concentrating Evaporators; Fluid Sprinkling, Spraying, and Diffusing; Fire Extinguishers; Liquid Heaters and Vaporizers; Heating Systems; Coating Apparatus.	May 16	May 16	503
47. KANOF, WM. J., Clutches and Power Stops; Brakes; Boring and Drilling; Land Vehicles (part)	June 24	July 11	974
48. ROEPKE, O. B., Electricity, General Applications; Igniters	Mar. 26	Mar. 14	757
49. SHEFFIELD, E. L., Drying and Gas or Vapor Contact with Solids; Ventilation; Liquid Separation or Purification.	July 27	July 4	543
50. LEVIN, SAMUEL, Resins; Rubber; Carbohydrates and Derivatives	June 23	June 23	1524
51. BACKUS, C. D., Radiant Energy	July 11	July 11	850
52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings; Pipes and Tubular Conduits.	Apr. 28	May 18	599
53. PECK, M. K., Label Pasting and Paper Hanging; Toilet; Books; Manifolding; Printed Matter; Stationery; Education; Paper Files and Binders; Tents, Canopies, Umbrellas and Canes; Curtains, Shades and Screens; Cutlery.	Sept. 30	July 27	207
54. STRACHAN, O. W., Electric Lamp and Discharge Devices (part)	June 27	July 7	458
55. BOWEN, S. T., Artificial Body Members; Dentistry; Surgery	May 15	Apr. 17	614
56. COCKERILL, S., Electrical and Wave Energy Chemistry; Laminated Fabrics (part); Paper Making	June 11	June 3	917
57. NICOLSON, G. D., Toys; Amusement and Exercising Devices; Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	July 24	Aug. 6	334
58. DOWELL, E. F., Abrading; Bottles and Jars; Stone Working	Sept. 17	Sept. 29	471
59. SHEPARD, P. W., Chemistry; Fertilizers; Gas, Heating and Illuminating; Heterocyclic Compounds; Compositions (part).	Mar. 10	Mar. 2	1358
60. GLASS, R. L., Electricity, Heating and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants; Marine Propulsion; Consumable Electrode Lamp and Discharge Devices.	June 10	June 10	410
61. YUNG KWAI, B., Winding and Reeling; Pushing and Pulling; Horology; Time-Controlling Apparatus; Railway Mail Delivery; Laminated Electrical Insulation, Belt, Hose, Tire and Ball Making; Boats and Buoys.	June 15	July 1	656
62. PUGH, E. C., Games; Geometrical Instruments; Tables; Mechanical Guns and Projectors	July 27	Aug. 27	398
63. WINKELSTEIN, A. H., Preserving; Poisons; Fermentation; Foods and Beverages; Proteins; Oils and Fats.	Apr. 23	May 2	1155
64. NASH, P. M., Acetylene; Gas Mixers; Compositions (part); Distillation; Fuel	July 22	July 23	1221
65. McDERMOTT, F. P., Electrical Conductors, Conduits, Connectors and Insulators; Telegraphy, Wave Transmission; Telephony, Repeaters and Relays.	June 29	July 2	591
Trade Marks: RICHMOND, F. A.	Dec. 18	Dec. 31	848
Designs: KALUPY, H. H.	Dec. 26	†Jan. 8	295

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

IN RE JOHNSTON ET AL.

No. 4,641. Decided December 1, 1942

[— F.(2d) —]

1. CLAIMS—LIMITATIONS—RESTRICTION OF BREADTH BY DEFINITION IN SPECIFICATION.

"It is to be noted that in defining the special sense in which certain terms are employed in the Christiansen et al. patent we find the following: '"edible oils" to designate oils used for therapeutic and alimentary purposes.' In our opinion this definition clearly confines that patent to the kind of oils and their use set out in the definition and to no others. These oils are of animal and vegetable origin and are not essential oils. They are fixed or fatty oils. Therefore the holding that the claims of that patent containing the words 'edible oils' are broad enough to include the fruit extracts and oils involved herein so far as we are able to ascertain we think is clear error."

2. PATENTABILITY—FRUIT COMPOSITIONS AND METHOD.

Claims covering a method for the preservation of aromatic, flavoring and coloring principles of fruit juices, fruit flavoring materials, essential oils of fruits and fruit extracts by the addition of hydroquinone and fruit compositions so stabilized *Held* patentable over the prior art.

3. SAME—SAME.

"It is our opinion that the tribunals below erred in holding that it would not involve more than the exercise of ordinary skill in the art to apply hydroquinone as an anti-oxidant to fruit oils, fruit extracts and fruit juices in view of references showing the use of that anti-oxidant with fatty animal and vegetable substances for therapeutic purposes and others showing that it is old in the art to preserve fruits and fruit juices."

APPEAL from the Patent Office. Reversed.

Messrs. Watson, Bristol, Johnson & Leavenworth (*Mr. Clair V. Johnson* of counsel) for Johnston et al.

Mr. W. W. Cochran (*Mr. Howard S. Miller* of counsel) for the Commissioner of Patents.

JACKSON, *J.:*

This is an appeal from a decision of the Board of Appeals of the United States Patent Office, one member dissenting, affirming a decision of the Primary Examiner rejecting for want of patentability over the prior art all of the claims, numbered 6, 7, and 11 to 17 inclusive, of appellants' application for patent.

Claims 6, 13, and 17 are illustrative and read as follows:

6. The method for the preservation of aromatic, flavoring and coloring principles of fruit juices, fruit flavoring materials, essential oils of fruits and fruit extracts, which comprises adding thereto hydroquinone, whereby oxygen deterioration of such principles is prevented without materially affecting the flavor and aroma.

13. A stabilized fruit composition comprising a material selected from the group consisting of fruit juices, fruit flavoring materials, essential oils of fruits and fruit extracts, and hydroquinone as an oxidation inhibitor.

17. A stabilized flavoring material containing an aromatic, flavoring and coloring principle of natural fruit origin, and an organic oxidation inhibitor of the chemical compound type belonging to the group consisting of hydroquinone, toluhydroquinone, catechol and resorcylaldehyde.

The references relied upon are: Heuser, 1,550,359, August 18, 1925; Christiansen et al., 1,745,604, February 4, 1930; Calcott et al., 1,913,367, June 13, 1933; Higby, 2,005,786, June 25, 1935; Balls et al., 2,011,465, August 13, 1935; Musher, 2,026,697, January 7, 1936.

The claimed invention, as set forth in the specification, relates to a method for the preservation of fruit flavoring materials, essential oils, extracts, etc., of fruit, by the inhibition of oxygen deterioration of aromatic, flavoring and coloring principles of such substances, and to a stabilized fruit composition produced thereby. The product and method claims are so closely related that it is not necessary to give them separate consideration.

When the application was first considered by the Primary Examiner it contained claims 2 to 11, all of which were rejected on prior art. After an appeal was taken to the Board of Appeals an affidavit was filed setting out the result of tests made in accordance with the Musher reference, and the application was remanded to the Primary Examiner under the provisions of rule 138 for reconsideration under the provisions of rule 76.

Upon remand, in his statement of May 21, 1940, the Primary Examiner held that the affidavit did not present evidence which was persuasive of any error in his rejection of claims 2 to 11 inclusive.

The decision of the Examiner was reversed on appeal as to claims 6, 7, and 11, and affirmed as to claims 2 to 5 inclusive and 8 to 10 inclusive.

The references relied upon in that appeal were, in addition to those relied upon here with the exception of the Christiansen et al. patent: Kunz, 1,757,967, May 13, 1930; Griffith et al., 2,032,612, March 3, 1936; Schoop, 2,082,426, June 1, 1937.

The Board there quoted claim 2 as illustrative. It reads as follows:

2. The method for the preservation of aromatic, flavoring and coloring principles of fruit juices, flavoring materials, essential oils and extracts, which comprises adding thereto an organic oxidation inhibitor in an amount which prevents oxygen deterioration of such principles and which does not materially affect the flavor and aroma thereof.

In its decision, the Board approved amendments to the claims in accordance with suggestions proposed by appellant at the time of argument, and considered the claims as so amended to refer to flavoring materials, essential oils and extracts of fruit juices and to limit the meaning of the term "oxidation inhibitor" to a specified type as "distinguished from raw vegetable organic materials."

After the said amendment was filed claims 6, 7, and 11 as amended remained in the case, and new claims numbered 12 to 17 inclusive were added.

The case having been duly reopened, the Examiner rejected all of the claims as lacking invention over the patents to Higby, Musher, Balls et al., and Heuser in view of the patent to Christiansen et al., which latter reference was cited for the first time. The Examiner in his statement of October 25, 1940, stated that hydroquinone is a known anti-oxidant as shown in the Calcott et al. reference. He also

stated that the patent to Christiansen et al. is concerned with using hydroquinone to treat edible materials which develop undesirable flavors and odors, and therefore the use of hydroquinone in treating fruit compositions by appellant would not involve invention. In this connection the Examiner stated:

> * * * it would appear that the antioxidant could be used for fruit compositions, since it is known that anti-oxidants are often (though admittedly not always) suitable for many edible compounds, as note for example, the variety of materials stabilized by Musher. Only a trial would be needed to ascertain whether or not hydroquinone could be used with fruit compositions.

Upon appeal from that decision of the Primary Examiner, the Board of Appeals, as hereinbefore mentioned affirmed the decision of the Examiner. The Board referred to its former decision, noting that the only reference then before it which discussed the use of hydroquinone as an anti-oxidant was the patent to Calcott et al. In the former decision the Board held that patent, instead of suggesting the use of hydroquinone as employed in the prior art, tended to discourage its use as not being especially effective, and because of this the patent suggested the use of other agents for the purpose of anti-oxidation. The Board stated:

> "Furthermore, the patentees were concerned with the treatment of such substances as oils, fats, fatty oils, fatty esters, fatty acids and salts of fatty esters to retard deterioration and development of rancidification."

The Board in its second decision, one member dissenting, reversed its former unanimous holding upon the same reasoning as that given by the Primary Examiner. It noted that the Christiansen et al. patent, like the Calcott et al. patent analyzed in the first decision, is also concerned with the preservation of oils, but particularly cod liver oil and castor oil, which tend to develop a "mal flavor" (an offensive or objectionable taste and/or odor). The Board stated:

> "The patentees [of the Christiansen et al. reference] claim a method of preventing the reconversion of *edible* oils by adding a compound selected from a certain class including as one of the class, hydroquinone."

The Board held there was no invention in trying the material suggested by the Christiansen et al. patent for use in another edible oil for the purpose of preservation and prevention of deterioration. It declined to find patentability in the use of hydroquinone for stabilizing purposes with fruit juices, fruit oils, etc., for the reason that it was employed for such purposes in an analogous use in the prior art, since the problem of preventing oxidation of fruit material was not new as is disclosed in the Heuser, Higby and Musher references.

There was no rejection of any of the claims on the ground that the claimed oxidation inhibitor belongs to the group consisting of hydroquinone, toluhydroquinone, catechol and resorcylaldehyde.

In the dissenting opinion it was stated that the Christiansen et al. reference was even more remote from the claims on appeal than the patent to Calcott et al. The bad taste and odor of cod liver oil and castor oil were pointed out as being notorious, and it was stated that these features can be removed by a steam-vacuum process. The dissenting opinion notes that in the Christiansen et al. patent hydroquinone or the like is added to prevent the reversion of cod liver oil and castor oil to their malodorous and malflavored condition after such steam treatment. The dissenting opinion further mentions that the fatty vegetable and animal oils of the references are quite different from the fruit materials claimed here and that it would not be naturally assumed that a substance found to have an anti-oxidant effect for fatty animal and vegetable oils would also be suitable for use with fruit juices, fruit extracts, etc.

A request for reconsideration was filed by appellants, and the Board, one member dissenting, affirmed its former decision, stating among other things that claim 1 of the Christiansen et al. patent describes the treatment of "edible oils" broadly and held this particular term would include the essential oils of fruit juices.

Thereupon this appeal was taken.

With respect to the holding below that only a trial would be needed to ascertain whether or not hydroquinone could be used with fruit juices, the Examiner cited the cases of *In re Grettie*, 26 C. C. P. A. (Patents) 1259, 104 F.(2d) 359, 508 O. G. 5, and 27 C. C. P. A. (Patents) 1293, 112 F.(2d) 812, 521 O. G. 533. Upon examination we find neither of these cases applicable to the facts herein. In the former Grettie case we held that an examination of the prior art would teach anyone skilled therein that lard, which is a fatty oil, might be treated to prevent rancidity by the same ingredients as were used as a stabilizer in shortening, which is also a fatty oil. In the latter Grettie case we held that there was no invention in determining by mere experiment that glycolic acid, known in the prior art as an effective anti-oxidant for non-drying oil such as olive oil, was also effective for the same purpose for other non-drying edible oils such as lard, beef fat, hydrogenated cotton-seed oil and other vegetable and animal fats and oils and mixtures thereof. In both of these cases it will be noted that there was held to be no invention in using an anti-oxidant known in the treatment of one kind of fixed or fatty oils in another oil of the same general family.

In our opinion the cases of *In re Sibley*, 24 C. C. P. A. (Patents) 1143 and 1155, 88 F.(2d) 960 and 964, 485 O. G. 21, 484 O. G. 747, are more in point. In those cases this court held that the use of certain anti-oxidants in the rubber art would not preclude a finding of patentability when used in a composition in the drying-oil art, the arts not being related.

That there is a clear distinction between oils of animal and vegetable origin (the fatty or fixed oils) and essential oils is well recognized by chemists. Hackh's Chemical Dictionary, 1929, defines essential oils as:

> "A group of volatile oils of characteristic odors. Distinguished from fatty oils by their volatility, non-greasiness, and non-saponifying property."

defines fixed oils as:

> "Any liquid fat which absorbs oxygen and becomes

resinous (drying oils) or remains liquid (non-drying oils) as compared with evaporating oils (essential or volatile oils)."; and defines an edible oil as:

"A fixed oil that is used as food or a food accessory."

The same authority compares the two classes of oils in the following language:

oil, essential—The volatile or distilled oils of plants, leaves, flowers, etc. They consist of aromatic hydrocarbons, aldehydes, alcohols, ethers, acids, terpenes or camphors.

oil, fatty—The non-volatile oils of plants and animals. They consist of mixtures of fatty acids and their esters (usually triglycerides) and are subdivided into three groups: solid (mainly stearin), semi-solid (mainly palmitin), and liquid (mainly olein).

The following definitions are quoted from Bennett's Standard Chemical and Technical Dictionary, 1939:

oil, essential (volatile oil). Oily substance having marked characteristic odors, occurring in fruits, flowers, leaves, stems, etc., e. g. lavender oil; complex mixtures chiefly of terpenes, and their oxygen derivatives.

oil, fixed. An oil which cannot be distilled without decomposition and does not evaporate under ordinary conditions, derived from animals, vegetables, or fishes by pressing or extracting.

We do not think it necessary to fully discuss the references, for the reason that we are in accord with the unanimous decision of the Board of Appeals on the first appeal in this case. While it is true that the preservation of fruit juices is referred to in certain of the cited prior art, the use of hydroquinone is mentioned only in the Christiansen et al. patent and in the Calcott et al. patent, and the latter, as we have hereinbefore stated, the Board held to be an improper reference.

It is clear from this record that if it had not been for the introduction of the Christiansen et al. reference as aforesaid the claims before us would have been allowed by the Board.

The Christiansen et al. patent relates to the preservation of fatty oils, particularly cod liver oil and castor oil, in a substantially tasteless and odorless condition. In accordance with the specification of that patent, the oils which are "malflavored" are processed in a vacuum in which steam is passed through the oil. The oil is thus demalflavored and in order to prevent its reversion to its original malflavored character an anti-oxidant is added, which may be hydroquinone.

[1] [2] [3] It is to be noted that in defining the special sense in which certain terms are employed in the Christiansen et al. patent we find the following: "'edible oils' to designate oils used for therapeutic and alimentary purposes." In our opinion this definition clearly confines that patent to the kind of oils and their use set out in the definition and to no others. These oils are of animal and vegetable origin and are not essential oils. They are fixed or fatty oils. Therefore the holding that the claims of that patent containing the words "edible oils" are broad enough to include the fruit extracts and oils involved herein so far as we are able to ascertain we think is clear error. We have no doubt that the Christiansen et al. patent is as far removed from being a proper reference in this proceeding as was the Calcott et al. patent. It is our opinion that the tribunals below erred in holding that it would not involve more than the exercise of ordinary skill in the art to apply hydroquinone as an anti-oxidant to fruit oils, fruit extracts and fruit juices in view of references showing the use of that anti-oxidant with fatty animal and vegetable substances for therapeutic purposes and others showing that it is old in the art to preserve fruits and fruit juices.

For the foregoing reasons, the decision of the Board of Appeals is reversed.

Reversed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922]

1,401,156, C. F. Jenkins, Lawn mower, D. C., E. D. Mich. (Detroit), Doc. 309, *Moto-Mower Co.* v. *Yard-Man, Inc.* Dismissed by consent (notice Dec. 30, 1942).

1,506,371, L. Kirschbraun, Bituminous composition, D. C., S. D. N. Y., Doc. 4/482, *The Patent & Licensing Corp.* v. *Lewis Asphalt Engineering Corp.* Consent decree (notice Dec. 7, 1942).

1,543,599, F. R. Chester, Leaf turner, D. C., W. D. Pa., Doc. 1825, *Gardner Displays Co.* v. *Gimbel Bros., Inc.* Dismissed with prejudice Dec. 24, 1942.

1,544,172, A. Perkins, Sorting and classifying of flat sheets, tallies, cards, or the like, D. C. Mass. (Boston), Doc. 1421, *The McBee Co.* v. *E. L. Leavitt.* Consent decree dismissing bill with prejudice Oct. 14, 1942.

1,692,292, W. Dubilier, Electric flasher device, D. C., S. D. N. Y., Doc. 12/500, *Radio Patents Corp.* v. *S. H. Kress & Co., Inc.* Dismissed for lack of prosecution (notice Dec. 7, 1942).

1,695,302, F. W. Thompson, Electric heater, D. C., Mass., Doc. 1254, *F. W. Thompson* v. *Draper Corp.* Dismissed with prejudice Dec. 15, 1942.

1,731,153, S. Shopflocher, Display package, filed Dec. 8, 1942, D. C., N. J., Doc. 2589, *One-Two-Three Co., Inc.*, v. *Pristine Products, Inc.*

1,759,639, M. Belloch, Buckle, D. C., S. D. N. Y. Doc. 13/382, *D. A. Sterling* v. *Ornament Co.* Dismissed for lack of prosecution (notice Dec. 7, 1942).

1,826,499, W. W. Blackburn, Lathing unit, C. C. A., 2d Cir., Doc. —, *J. A. Franklin* v. *Masonite Corp.* Decree affirmed (notice Dec. 31, 1942).

1,944,930, H. C. Drake, Flaw detector, C. C. A., 2d Cir., Doc. —, *Sperry Products, Inc.*, v. *Association of American Railroads et al.* Judgment reversed (notice Dec. 14, 1942).

1,970,823, R. Suczek, Vehicle wheel suspension and springing, C. C. A., 6th Cir., Doc. 9005, *R. Suczek* v. *General Motors Corp.* Claims 25 to 32 inclusive held invalid Dec. 16, 1942.

2,022,467, W. A. Heyman, Process of making soluble coffee and product, D. C., Mass., Doc. 990, *W. A. Heyman et al.* v. *M. Weisman et al.* Stipulation of dismissal Dec. 11, 1942.

2,032,239, A. W. Wedlock, Manufacture of an improved vitreous material, filed Dec. 21, 1942, D. C., N. J., Doc. 2637, *Mycalex Corp. of America et al.* v. *Electronic Mechanics, Inc., et al.*

2,065,304, H. S. Cover, Respirator, C. C. A., 2d Cir., Doc. —, *H. S. Cover* v. *Hygeia Respirator.* Decree affirmed (notice Dec. 17, 1942).

2,073,270, B. Valjean, Combustion apparatus, D. C., E. D. Mich., S. Div., Doc. 2565, *Motor Wheel Corp. et al.* v. *Evans Products Co.* Stipulation and order of discontinuance (notice Dec. 15, 1942).

2,098,684, W. L. Fry, Slip cover, D. C., E. D. Pa., Doc. 1846, *A. C. Ahlberg et al.* v. *Sure Fit Products Co.* Dismissed Jan. 6, 1943.

2,169,146, C. Iverson, Vulcanizing mold and other presses, C. C. A., 6th Cir., Doc. 9143, *National Rubber Machinery Co.* v. *The McNeil Machine & Engineering Co.* Decree affirmed Dec. 17, 1942.

2,173,044, Ruggles & Smith, Auxiliary transmission mechanism for four-wheel drive automotive vehicles, (declaratory judgment), D. C. Del., Doc. 198, *The Timken-Detroit Axle Co.* v. *Alma Motor Co.* Plaintiff is estopped to contest validity of said patent Nov. 30, 1942.

2,181,163, R. W. Akins, Adjustable support for holdings, D. C., N. D. Ohio, E. Div., Doc. 20745, *Adjusta-Post Co.* v. *Adjustable Jack Co. et al.* Consent judgment holding patent valid and infringed; injunction Dec. 8, 1942.

2,191,939, W. S. Marx, Jr., Photo-engraving, D. C., Mass., Doc. 1595 *Printing Arts Research Laboratories, Inc.*, v. *C. M. Carlisle.* Consent judgment entered for plaintiff for injunction Dec. 28, 1942.

2,259,962, H. L. Owen, Shingle, D. C, S. D. Calif., C. Div., Doc. 1930 RJ, *V-Way Shingle Products, Inc.*, v. *Chas. Fix et al.* Dismissed for want of prosecution Dec. 12, 1942. Doc. 1931–BH, *V-Way Shingle Products, Inc.*, v. *L. C. Kottner et al.* Decree as above.

2,265,936, E. Cowles, Apparatus for treating paper stock, D. C., N. D. N. Y., Doc. 977, *The Cowles Co. et al.* v. *American Paper Machinery & Engineering Works, Inc.* Stipulation of discontinuance Dec. 7, 1942.

2,267,967, K. C. Augenstein, Extensible linkage, filed Dec. 2, 1942, D. C. Conn., Doc. 903, *E. F. Speidel et al.* v. *Benrus Watch Co.*

2,298,600, B. Stember, Belt or other carrying article with pocket, filed Dec. 12, 1942, D. C., S. D. N. Y., Doc. 20/103, *Schaffer Belts, Inc.*, v. *Trade Accessories, Inc.. et al.*

Re. 21,030, E. H. Greibach, Bone conduction hearing device, D. C. Mass., Doc. 1899, *Sonotone Corp.* v. *The Maico Co., Inc.* Stipulation of dismissal Dec. 1, 1942.

Des. 114,395, L. W. Goodkind, Lady's suit, D. C., S. D. N. Y., Doc. 14/118, *Londonderry, Inc.*, v. *Gaynes, Inc.* Stipulation of discontinuance Dec. 11, 1942.

Des. 116,640, M. Solash, Hat, D. C., S. D. N. Y., Doc. 15/362, *M. Solash* v. *Darling Hat Co., Inc.* Dismissed for lack of prosecution (notice Dec. 7, 1942).

Des. 117,135, M. Verrand, Dress, D. C., S. D. N. Y., Doc. 6/206 *Neufeld-Furst & Co., Inc.*, v. *Darcy Dress, Inc., et al.* Consent judgement as to Darcy Dress, Inc., Oct. 29, 1941. Cause dismissed for lack of prosecution as to Roman Frocks, Inc., Dec. 7, 1942.

Des. 119,101, A. Philippe, Pin clip, D. C., S. D. N. Y., Doc. 8/438, *Trifari, Krussman & Fishel, Inc., et al.* v. *Kaufman-Ruderman Co., Inc.* Dismissed for lack of prosecution Dec. 7, 1942.

Des. 121,956, S. Holstein, Belt, D. C., S. D. N. Y., Doc. 10/334, *Sterling Button Co., Inc.*, v. *H. Pomerantz, Inc.* Dismissed for lack of prosecution Dec. 7, 1942.

Des. 124,925, S. Reich, Dress, D. C., S. D. N. Y., Doc. 12/494, *Franklin Dress Co., Inc.*, v. *Lombardy Dresses, Inc.* Stipulation of discontinuance Dec. 14, 1942.

Des. 125,001, O. W. Klingsick, Fluorescent lighting fixture, D. C. N. J., Doc. 1693, *Day-Brite Lighting, Inc.*, v. *Work-O-Lite Co.* Dismissed Dec. 28, 1942.

Des. 125,466, M. Charbonnet, Textile fabric, D. C., S. D. N. Y., Doc. 14/16, *Cohn-Hall-Marx Co.* v. *Martin Weiner Co. et al.* Consent judgment (notice Dec. 10, 1942).

Des. 125,681, R. Buzzini, Textile fabric, D. C., S. D. N. Y., Doc. 12/402, *Frank Associates, Inc.*, v. *Kenville Fabrics Corp. et al.* Judgment as to Mike Levine, Inc., May 28 1941. Cause dismissed for lack of prosecution as to Kenville Fabrics Corp. (notice Dec. 7, 1942).

Des. 125,693, W. Markle, Pin, D. C., S. D. N. Y., Doc. 13/257, *The Castle-Cliff Co.* v. *Brier Mfg. Co., Inc., et al.* Stipulation of discontinuance as to F. W. Woolworth Co. May 12, 1941. Consent order of discontinuance as to Gimbel Bros., Inc., July 10, 1941. Cause dismissed for lack of prosecution Dec. 7, 1942.

Des. 126,319 I. Geist, Blouse, D. C., S. D. N. Y., Doc. 15/429, *Mitchell & Weber, Inc.*, v. *Glenwear, Inc.* Dismissed for lack of prosecution (notice Dec. 7, 1942).

Des. 126,329, A. Berin, Dress, D. C., S. D. N. Y., Doc. 13/383, *Harvey Berin Co., Inc.*, v. *L. & D. Beilinson, Inc., et al.* Consent order of discontinuance as to L. &. D. Beilinson, Inc., Sept. 20, 1941, and as to Arnold Constable & Co., Inc., Sept. 25, 1941. Cause dismissed for lack of prosecution Dec. 7, 1942.

Des. 126,500, H. Troy, Dress, D. C., S. D. N. Y., Doc. 14/225, *Hannah Troy, Inc.*, v. *Suzanne, Jr. Frocks, Inc.* Stipulation of discontinuance Dec. 8, 1942.

Des. 128,454, M. Hobgood, Dress ensemble, D. C., S. D. N. Y., Doc. 15/270 *L. & D. Beilinson* v. *Jane Modes, Inc.* Dismissed for lack of prosecution (notice Dec. 7, 1942).

Des. 129,687, I. Goldstein, Dress, D. C., S. D. N. Y., Doc. 16/234, *Graceful Lady Dresses, Inc.*, v. *Form-Fit Dresses, Inc.* Judgment dismissing complaint upon merits (notice Dec. 7, 1942).

Des. 130,864, J. H. Abt, Textile fabric D. C., S. D. N. Y., Doc. 18/201, *Wolf & Barse, Inc.*, v. *Philip Schlansky & Bro., Inc.* Stipulation of discontinuance (notice Dec. 9, 1942).

Des. 131,395, M. Sadinoff, Lace curtain, D. C., S. D. N. Y., Doc. 19/135, *M. Sadinoff et al.* v. *Acme Summit Mills, Inc.* Stipulation of dismissal (notice Dec. 4, 1942).

Des. 132,497, J. Moskowitz, Dress ensemble, D. C., S. D. N. Y., Doc. 19/40, *Ben Fox Dress Co.* v. *M. Sway-bill, Inc.* Stipulation of discontinuance (notice Dec. 4, 1942). Doc. 20/77, *Ben Fox Dress Co.* v. *Better Mode Frocks.*

Des. 134,240, A. Garay, Braiding, filed Dec. 8, 1942, D. C., S. D. N. Y., Doc. 20/84, *M. Singer* v. *Garay & Co., Inc.*

Adjudicated Patents

(C. C. A. Calif.) Petersen patent, No. 1,628,062, for coin-slot mechanism for vending machines, claims 2, 3, 4, 14, 15, 19, 20, 21, and 22 *Held* invalid. *Petersen* v. *Coast Cigarette Vendors,* 131 F.(2d) 389.

(C. C. A. Ky.) Foresman and Larrabee patent, No. 1,683,341, for stoker, *Held* not infringed. *Westinghouse Electric & Manufacturing Co.* v. *Hesser,* 131 F.(2d) 406.

(D. C. Del.) Ruggles and Smith patent, No. 2,173,044, for auxiliary transmission mechanism for four-wheel-drive automotive vehicles, claims 5, 6, 7, 8, 9, 10, 11, and 12 *Held* infringed, claim 4 *Held* not infringed. *Timken-Detroit Axle Co.* v. *Alma Motor Co.,* 47 F. Supp. 582.

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 2,243,985, C. H. Sparklin, Suction cleaner, decided January 7, 1943, claim 1.

Pat. 2,254,022, J. N. Whitaker, Electrical wave generator, decided January 7, 1943, claims 1, 2, 3 and 4.

Disclaimer

2,246,703.—*Ernest W. Thiele* and *Robert C. Gunness,* Chicago, Ill. ALKYLATION. Patent dated June 24, 1941. Disclaimer filed December 26, 1942, by the assignee, *Standard Oil Company (Indiana).*

Hereby enters this disclaimer to claims 1, 5 and 6 in said specification.

Trade-Mark Registrations Canceled

178,725. Biscuits. The Shredded Wheat Company, Niagara Falls, N. Y. Registered Jan. 15, 1924. Canceled Jan. 18, 1943.

264,077. Toilet cream. Mitsuwa Co., Inc., San Francisco, Calif. Registered Nov. 19, 1929. Canceled Jan. 18, 1943.

343,274. Mechanics' work stands. The Armstrong Mfg. Co., Bridgeport, Conn. Registered Feb. 16, 1937. Canceled Jan. 18, 1943.

390,527. Shoes. David Brown Shoe Company, Baltimore, Md. Registered Sept. 23, 1941. Canceled Jan. 18, 1943.

392,079. Salad dressing. Wm. H. Gardner, Los Angeles, Calif. Registered Dec. 9, 1941. Canceled Jan. 18, 1943.

394,422. Ladies' coats. Kroywen Coats, New York, N. Y. Registered Mar. 31, 1942. Canceled Jan. 18, 1943.

396,354. Slide fasteners. Far East Trading Corporation, New York, N. Y. Registered July 7, 1942. Canceled Jan. 18, 1943.

Changes in Classification

Order No. 3,687, January 14, 1943, directs:

The following changes in the classification of inventions are hereby directed, to take effect immediately:

In *class 15, Brushing, Scrubbing, and General Cleaning* (Division 27), change the title of subclass 104.16 to read:

Implements
Pipe and tube cleaners
Inside
Reciprocating tool
104.16 Scraper, cutter, wiper or brush

and in the definition after "disintegrates," add *wipes,*; and establish the following subclass and definition:

Implements
Pipe and tube cleaners
Inside
Reciprocating tool
Scraper, cutter, wiper or brush
104.165 Non-piercing fabric holder,

104.165. Devices under subclass 104.16 which are adapted to hold a fabric wiper without piercing the same.
(1) Note.—The fabric may be wrapped about the end of the holder or may pass through a slot near or at the end of the holder.
(2) Note.—Complete the search in this class, subclass 211.

These patents have been taken, for the most part, from class 42, Firearms, subclasses 91 and 92 abolished in this order.

In *class 16, Miscellaneous Hardware* (Division 20), establish the following subclass and definition:

Handles
110.5 Receptacle,

110.5. Devices under subclass 110 where there is included in the handle structure, a storage cavity or other receptacle.
Search Classes—
15—BRUSHING, SCRUBBING, AND GENERAL CLEANING, subclass 133 and indented subclasses.
30—CUTLERY, subclasses 86 and 125.
42—FIREARMS, subclass 7.
132—TOILET, subclasses 75 and 81.
135—TENTS, CANOPIES, UMBRELLAS AND CANES, subclass 47.
145—WOODWORKING TOOLS, subclass 62 and indented subclass.
174—ELECTRICITY, CONDUCTORS AND INSULATORS, subclass 46.

These patents have been taken, for the most part, from class 16, Miscellaneous Hardware, subclass 110 and indented subclasses; and from class 42, Firearms, subclass 91 and indented subclass, abolished in this order.

In *class 41, Ornamentation* (Division 52), abolish the following subclasses and their definitions:

Apparatus and appliances
3.5 Stencil making,
Surface type
Relief and intaglio
Reproducing
25.5 Preparing make-readys,
Surface type—Continued
Pigment
31.6 Copying surfaces or compositions,
Removing portions of coating
38.5 Stencil making
38.6 Sheets or compositions,
Chemical
41.5 Planographic printing surface,

The patents from subclasses 3.5, 38.5, and 38.6 have been placed, for the most part, in class 101, Printing, subclass 127 and indented subclasses established hereinafter, class 106, Compositions, Coating or Plastic, appropriate subclasses and class 117, Coating: Processes and Miscellaneous Products, subclass 35.5; the patents from subclass 25.5 have been placed in class 101, Printing, subclass 401.3; the patents from 31.6 have been placed in class 101, Printing, subclass 149.4, class 106, Compositions, Coating or Plastic, subclass 14.5, and class 117, Coating: Processes and Miscellaneous Products, subclass 35.6, established hereinafter; and the patents from subclass 41.5 have been placed in class 101, Printing, subclass 149 and its indented subclass established hereinafter.

In *class 42, Firearms* (Division 22), abolish the following subclasses and their definitions:

Implements
91 Cleaning
92 Rod joints,
95 Shell extracting.

These patents have for the most part been put in the pertinent subclasses of class 15, Brushing, Scrubbing, and General Cleaning and class 287, Rod Joints or Couplings; and also in class 16, Miscellaneous Hardware, subclass 110.5 and class 81, Tools, subclass 3.05, newly created in this order.

In *class 81, Tools* (Division 29), establish immediately before "Receptacle closure removers" the following subclass and definition:

Special
3.05 Shell, projectile or wad extractors,

3.05 Devices for extracting a shell, projectile or wad from a gun barrel.
(1) Note.—See this class, subclasses 3.10 to 3.49, inclusive, and subclass 48, for other tools capable of similar work.
Search Classes—
29—METAL WORKING, subclass 86.1 and indented subclass.
294—HANDLING—HAND AND HOIST-LINE IMPLEMENTS, subclass 86, and indented subclasses.

These patents have been taken for the most part from class 42, Firearms, subclass 90, and also subclass 95, abolished in this order.

In *class 101, Printing* (Division 17), abolish the following subclasses and their definitions and notes, these subclasses being re-established hereinafter with new titles and definitions:

Stenciling
127 Stencil plates
128 Settable units,
Planographic
149 Processes
149.5 Copying.

The patents contained in subclasses 127 and 128 have been placed, for the most part, in class 101, Printing, subclass 127 and its indented subclasses established hereinafter and the patents contained in subclasses 149 and 149.5 have been placed, for the most part, in class 101, Printing, subclass 149 and its indented subclasses established hereinafter.

In *class 101, Printing* (Division 17), establish the following subclasses and definitions:

Stenciling
127 Stencils
127.1 Mounts, holders and extensions
128 Settable units,
128.1 Attaching,
128.2 Laminated and/or plural sheet and/or coated base and manufacture
128.3 Including photographic step or surface,
128.4 Manufacture,
Planographic
149 Plates, surfaces and processes
149.1 Film to film imbibition,
149.2 Elements and making including use
149.3 Including mercury or mercury compounds,
149.4 Copying (e. g., hectographic),
149.5 Copying processes (e. g., hectographic).

127. Subject matter under subclass 114 including (1) stenciling elements, i. e., stencils and blanks including mounts, holders and extensions, (2) processes of and apparatus for manufacture of such elements not elsewhere provided for, and (3) such processes combined with a use step.
(1) Note.—The term "blank" includes the sheet or plate through which the stenciling openings are to be made or the unit including the unperforated stencil sheet and its attached protecting or backing sheets. The term "stencil" includes the sheets or plates with the openings in them and also such completed sheets or plates combined with backing or protective sheets.
Search this class, subclasses—
48—and the indented subclasses, for selective or progressive addressing machines using stencils.
112—for stencil plates used in selective and progressive printing machines.
129—for stenciling processes.
Search Classes—
33—GEOMETRICAL INSTRUMENTS, particularly subclass 174, and see the reference to class 101, PRINTING, in note (3) in said subclass.
35—EDUCATION, particularly subclasses 37 and 38, for writing guides.
91—COATING, subclass 65, for devices protecting the surface adjacent to the part being painted.
106—COMPOSITIONS, COATING OR PLASTIC, appropriate subclasses, for stenciling compositions.
117—COATING, PROCESSES AND MISCELLANEOUS PRODUCTS, appropriate subclass and see subclass 35.5 for stencil blank making and see the notes thereto.
120—STATIONERY, subclass 41, for erasing shields.
132—TOILET, subclass 88.5, for stencils peculiarly adapted for use with toilet articles, e. g., to act as templets in the application of rouge, lipstick, or nail polish.

127.1. Devices under subclass 127, including (A) a stencil or blank combined with (1) a mount or holder, usually a frame surrounding it, (2) an extension usually an index tab or sheet bearing indicia, (3) means for attaching the stencil or blank to other structures such as a duplicating machine or surface to be stenciled or (4) any of the above combined and (B) the mounts or holders per se.
(1) Note.—Single stencil sheets or plates provided with an adhesive area are in subclass 127.
Search this class, subclass—
415.1—for flexible sheet securing devices.
Search Classes—
129—PAPER FILES AND BINDERS, subclass 16 and the indented subclasses for index cards and filing elements therein provided.
160—CLOSURES, PARTITIONS AND PANELS, FLEXIBLE AND PORTABLE, subclass 371 and indented subclass, for frame type devices for flexible fabrics and see the notes thereto for the search for similar structures.
197—TYPEWRITING MACHINES, subclasses 135 and 136, for card holders which hold cards against the platen of a typewriter.

128. Subject matter under subclass 127.1, including a plurality of stencils which can be assembled in a desired order and adjuncts thereto.
Search Class—
160—CLOSURES, PARTITIONS AND PANELS, FLEXIBLE AND PORTABLE, subclass 218 and indented subclass, for movably interconnected plural strip, slat or panel type devices therein provided.

128.1. Subject matter under subclass 127.1, including means for attaching the stencil or stencil blank to other structures.

128.2 Subject matter under subclass 127, including (1) laminated or plural sheets including a blank which is or may be cut to form a stencil, (2) a specific base sheet combined with a coating, (3) apparatus and processes of manufacture of the above and (4) such processes combined with a use step.
Search this class, subclasses—
128.4—for manufacture processes including the assembly of a stencil or blank and its frame and for stencil cutting processes even though a laminated or coated base is cut.
129—for use processes only and see the notes thereto.
149.4—for hectographic surfaces, sheets and plates which are not stencils.

128.3. Subject matter under subclass 128.2 involving a photographic step or surface.
Search Class—
95—PHOTOGRAPHY, subclass 5, for processes and subclass 8 for sensitized stencil blanks wherein a photographic step or composition or surface is significantly claimed.

128.4. Subject matter under subclass 127, including apparatus and processes of manufacture per se or combined with a use step.
Search this class, subclass—
129—for use processes only.
Search Class—
164—CUTTING AND PUNCHING SHEETS AND BARS, for cutting and punching in general.

149. Subject matter under subclass 130, including (1) processes of planographic printing, (2) planographic printing elements such as plates, surfaces, sheets, laminated sheets and compositions, (3) processes of manufacture of such elements, and (4) combined use and manufacture processes.
Search this class, subclasses—
395—for printing plates where physical structure other than planographic printing surface characteristics is defined and related processes of manufacture.
401.1—for printing blanks and processes not restricted to planographic printing.
Search Classes—
95—PHOTOGRAPHY, particularly subclasses 5.2 and 5.4 for processes of manufacture of planographic printing surfaces involving significant photographic features and subclass 8 for sensitized planographic blanks.
106—COMPOSITIONS, COATING OR PLASTIC, appropriate subclasses for coating and plastic compositions, particularly subclass 2, for coating repellant compositions and subclass 14.5 for hectographic or copying compositions.
117—COATING: PROCESSES AND MISCELLANEOUS PRODUCTS, particularly subclass 35.6 for hectographic or copying surfaces which are distinguished solely by the coating composition.

149.1. Subject matter under subclass 149, a marking material absorbed in a master pellicle is transferred to another pellicle by absorption through contact between the pellicles. Usually, the subject matter relates to the duplication of color photographs by dye migration.
Search this class, subclasses—
149.4 and 149.5—for copying sheets, for producing plural copies from a master sheet having ink embedded in its surfaces and related processes and subclass 211, for other multicolor printing processes.
Search Classes—
8—BLEACHING AND DYEING: FLUID TREATMENT AND CHEMICAL MODIFICATION OF TEXTILES AND FIBERS, appropriate subclasses for dyeing processes of general application.
41—ORNAMENTATION, subclasses 27 and 28 for processes of coloring photographs therein provided and subclass 33 for methods of transferring fluid designs to a surface therein provided.
88—OPTICS, subclass 19.5 for motion picture vehicles and elements therein provided.
95—PHOTOGRAPHY, particularly subclasses 2, 5, and 5.1 for photographic processes involving a significant photographic step, surface, or composition.

149.2. Subject matter under subclass 149, including (1) planographic printing plates, surfaces or compositions (2) processes of manufacture of such plates, surfaces, or compositions, and (3) such processes combined with use steps.
(1) Note.—The inking of the plate, per se, is not regarded as a manufacturing step.
(2) Note.—See notes to the definition of subclass 149.
Search Class—
204—CHEMISTRY, ELECTRICAL AND WAVE ENERGY, particularly subclass 17, for processes of making printing members which include electrolytic steps.

149.3 Subject matter under subclass 149.2, involving the use of mercury or mercury compounds to form ink-repellent areas.

149.4 Subject matter under subclass 149.2 including (1) elements usable in the process defined in subclass 149.5, (2) processes of manufacture of such elements and (3) such processes combined with a use step.
(1) Note.—The application of ink, dye or equivalent transfer medium or the moistening or application of a solvent to the master or copy sheets is not considered as a manufacturing step.
Search this class, subclasses—
127—and indented subclasses, particularly 128.2, for stencil openings.
149.5—for copying processes and see the notes thereto.
Search Classes—
106—COMPOSITIONS, COATING OR PLASTIC, subclass 14.5 for compositions for producing copying surfaces and see the notes thereto.
117—COATING: PROCESSES AND MISCELLANEOUS PRODUCTS, subclass 35.6 for coated bases designed for use as copying surfaces and see the notes thereto.

149.5 Processes under subclass 149 which involve the use of a master sheet in which an ink or other transfer fluid is incorporated in a medium usually gelatinous on or constituting the master sheet and plural copies are made by successively contacting copy sheets with the medium, so that the ink or transfer fluid is taken up by the copy sheets. The master sheet often is moistened with water or a solvent.

Search this class, subclasses—
33 and 34—for means and processes of transferring preparatory designs therefor provided.
131—and indented subclasses, for copying apparatus.
149.1—for film to film imbibition processes.
149.4—for copying element manufacturing processes even though a use step is claimed.
Search Class—
41—ORNAMENTATION, subclass 33, for methods of transferring fluid designs therefor provided and see the notes.

The patents placed in subclass 127 and indented subclasses have been taken, for the most part, from class 41, Ornamentation, subclasses 3.5, 38.5 and 38.6, abolished in this order, and class 101, Printing, subclasses 127 and 128, abolished and re-established in this order. The patents placed in subclass 149 and indented subclasses have been taken, for the most part, from class 41, Ornamentation, subclasses 31.6 and 41.5 abolished in this order and class 101, Printing, subclasses 149 and 149.5 abolished and re-established in this order.

In *class 102, Ammunition and Explosive Devices* (Division 22), subclass 39, change the title to read:

Cartridges
39 Blank, noxious gas containing or generating, or with bore cleaning member,

In *class 106, Compositions, Coating or Plastic* (Division 64), establish the following subclass and definition:

Coating or plastic compositions
14.5 Hectographic or copying,

14.5. Coating or plastic compositions specially designed for producing sheets or surfaces for receiving the negative design in copy printing and usually serving as a member from which to print a large number of copies.
Search this class, subclasses—
311—and other appropriate subclasses below, for duplicator fluids, that is, solvents which may be applied to the hectograph surface or the copy sheet.
Search Classes—
101—PRINTING, subclass 131 and indented subclasses, for apparatus employing copying compositions; subclass 149.4, for hectographs having structural features other than the coating material or a base of a particular material; and subclass 149.5, for methods of copying utilizing copying compositions.
117—COATING: PROCESSES AND MISCELLANEOUS PRODUCTS, subclass 35.6, for hectographs which are mere bases coated with copying compositions.

The patents in this subclass have been taken, for the most part, from class 41, Ornamentation, subclass 31.6 abolished in this order.

In *class 117, Coating: Processes and Miscellaneous Products* (Division 38), establish the following subclasses and definitions:

35.5 Stencil blank making.
35.6 Hectograph or copying surface.

35.5 Processes which are directed to the production of blanks intended for use in the preparation of stencils and the resultant coated bases, as well as backing sheets therefor which are coated bases.
Note.—Many of the patents in this subclass are for blanks of the kind wherein the coating is type impressible.
Search Class—
101—PRINTING, subclass 127, and indented subclass, for stencils per se, and subclasses 128.2 and 128.3, for stencil blanks which contain structure over and above the mere coated bases, such as, for example, laminated or plural sheet stencil blanks and their production.

35.6. Processes which are directed to the production of a base having a coating thereon for receiving the negative design in copy printing, usually by imbibition from an inked positive, and from which negative, positive copies may be made, and the resultant coated bases.
Search Class—
101—PRINTING, subclass 131 and indented subclasses, for apparatus employing hectographs; subclass 149.4, for hectographs or copying surfaces which have structural features other than the coating or a base of a particular material; and subclass 149.5, for processes employing hectographs.

The patents in subclass 35.5 have been taken, for the most part, from class 41, Ornamentation, subclass 31.6 abolished in this order, and those in subclass 35.6 have been taken from class 41, Ornamentation, subclass 38.6, also abolished in this order.

In *class 255, Earth Boring* (Division 32), establish the following subclasses and definitions:

Rigs
Advancing motor
4.4 Reciprocating tool
4.6 Electric motor,
4.8 Electric motor.

4.4. Rigs under subclass 4, in which the bit has a reciprocating motion.

4.6 Rigs under subclass 4.4, in which the reciprocating bit is electric motor driven.

4.8 Rigs under subclass 4, in which the bit is electric motor driven.

The patents placed in these subclasses have been taken from class 255, Earth Boring, subclass 4.

In *class 2, Apparel* (Division 24), subclass 2, cancel the existing note and add:
Search Classes—
9—BOATS AND BUOYS, subclass 20, for life-preservers fashioned in some degree after a garment.
61—HYDRAULIC AND EARTH ENGINEERING, subclasses 70 and 71, for diving suits.

In *class 7, Compound Tools* (Division 29), main class definition, under "(2) Search Classes", add:
15—BRUSHING, SCRUBBING, AND GENERAL CLEANING, subclass 105 and indented subclasses.

In *class 9, Boats and Buoys* (Division 61), subclass 20, add:
Search Class—
2—APPAREL, for garments in general.

In *class 15, Brushing, Scrubbing, and General Cleaning* (Division 27), subclass 249, under "(2) Search Classes", cancel the reference to class 42, Firearms, subclass 91.

In *class 16, Miscellaneous Hardware* (Division 20), subclass 110, cancel note (1) and add under (14) Note:
287—ROD JOINTS OR COUPLINGS, subclass 91, for swivel joints for mounting handles to allow free motion with respect to their support.

In *class 18, Plastics* (Division 15), subclass 8, note 6, add:
57—TEXTILES, SPINNING, TWISTING AND TWINING, for processes and apparatus for spinning, twisting and twining artificial filaments where the filament forming means is only conventionally claimed.

In *class 21, Preserving, Disinfecting, and Sterilizing* (Division 63), subclass 60.5, cancel the notes and substitute:

Search Classes—
75—METALLURGY, subclass 96, for the use of protective layers on molten metal to prevent oxidation.
117—COATING: PROCESSES AND MISCELLANEOUS PRODUCTS, for preservation by coating with adherent, solidifiable material.
169—FIRE-EXTINGUISHERS, appropriate subclasses, particularly subclass 4, for the use of fluid blankets for the sole purpose of fire extinguishing or preventing.
226—FILLING AND CLOSING PORTABLE RECEPTACLES, appropriate subclasses for processes of packaging materials which include the use of a preserving atmosphere or layer.

In *class 23, Chemistry* (Division 59), subclass 230, add the following note:
(3.5) Note.—See class 137, WATER DISTRIBUTION, subclass 78, for processes and apparatus wherein a physical condition of a fluid is measured and fluid material is added to maintain or restore such physical condition without producing any new product.;

and in subclass 253, add the following note:
(2.5) Note.—See class 137, WATER DISTRIBUTION, subclass 78, for apparatus for measuring a physical condition of a fluid and adding fluid material thereto for maintaining or restoring such physical condition.

In *class 28, Textiles* (Division 21), in the definition of subclass 71.5, add:
(3) Note.—This subclass takes capstans and other similar devices for imparting forward movement to a strand, when not claimed in combination with any particular machine which combination is elsewhere provided for, and when the strand is not performing work such as hauling, hoisting, conveying, etc.

and in note (1), under "Search Classes", add:
254—PUSHING AND PULLING IMPLEMENTS, subclass 176 and its indented subclass, for capstan structure peculiar to cable hauling devices.

In *class 30, Cutlery* (Division 53), subclass 86, number the existing note (*1*) and add:

Search Class—

16—MISCELLANEOUS HARDWARE, subclass 110.5 and the notes thereto appended, for handles which also serve as receptacles.;

and in subclass 125, add:

Search Class—

16—MISCELLANEOUS HARDWARE, subclass 110.5 and the notes thereto appended, for handles which also serve as receptacles.

In *class 33, Geometrical Instruments* (Division 62), subclass 174, under "(3) Search Classes", in the reference to class 101, Printing, add—*and the indented subclasses,*— after "127".

In *class 34, Drying and Gas or Vapor Contact with Solids* (Division 49), subclass 58, note (4), add:

198—CONVEYERS—POWER-DRIVEN, subclasses 6 and 128.

302—CONVEYERS—FLUID CURRENT, subclass 38.

In *class 41, Ornamentation* (Division 52), subclass 25, change "Search Class" to *Search Classes* and add:

101—PRINTING, subclass 401.3 for "make-readys" used in the printing art (also termed over-lays, underlays, and inner-lays) and processes of preparing and using them.;

and in subclass 27, under "(2) Search Classes", in the reference to class 101, Printing, cancel "subclass" and substitute *subclasses 149.1 and.*

In *class 42, Firearms* (Division 22), main class definition, add the following:

(4) Note.—For gun cleaners, see class 15, BRUSHING, SCRUBBING, AND GENERAL CLEANING, subclass 104.05 and the indented subclasses.

(5) Note.—For shell, projectile or wad extractors, see class 81, TOOLS, subclass 3.05 and the notes thereto appended.;

in subclass 7, add the following note:

Search Class—

16—MISCELLANEOUS HARDWARE, subclass 110.5 and the notes thereto appended for handles which also serve as receptacles.;

and in the definition of subclass 90, cancel "ball extractors" and "ramrods".

In *class 60, Power Plants* (Division 18), main class definition, add the note:

Search Class—

252—COMPOSITIONS, appropriate subclasses, particularly subclasses 67 and 71 and their indented subclasses. Patents are placed in class 252, COMPOSITIONS, (1) claiming admixtures of ingredients, or claiming an old compound, limited to use as a hydraulic or other type power transmission fluid, (2) processes of power generation claimed broadly and distinguished solely by the composition or compound used, and (3) power plant apparatus distinguished by the composition or compound therein, i. e., where characteristics of apparatus structure are not claimed. The preceding are placed in class 252, COMPOSITIONS, even though freezing or boiling points, temperatures of use, or amount of power transmitted are specified.

In *class 68, Textiles, Fluid Treating Apparatus* (Divisions 2, 27), main class definition, rewrite the eighteenth paragraph to read:

The patents for coating or impregnating textiles are in class 91, COATING, and class 117, COATING: PROCESSES AND MISCELLANEOUS PRODUCTS.

In *class 75, Metallurgy* (Division 3), subclass 96, add:

Search Class—

252—COMPOSITIONS, subclasses 2 and 3 and subclass 381 and indented subclasses, for compositions for forming protective coatings, layers or zones for excluding air or other substances.

In *class 81, Tools* (Division 29), in the definition preceding subclass 3.10, add:

(1.5) Note.—See this class, subclass 3.05 for shell, projectile or wad extractors.;

in note (4) cancel the reference to 42, Firearms, subclass 95; in subclass 48, insert at the end of note (1), before the period (.), *and especially subclass 3.05 for shell, projectile or wad extractors* and in note (2), cancel the reference to 42, Firearms, subclass 95.

In *class 87, Textiles, Braiding, Netting and Lace Making* (Division 21), subclass 56, add:

Search this class, subclass—

61—for miscellaneous tension devices.;

in subclass 29, add:

Search Class—

139—TEXTILES, WEAVING, subclass 13 and indented subclasses, for circular progressive shedding weaving machines.;

in subclass 33, number the existing note (*1*) and add:

Search Class—

139—TEXTILES, WEAVING, subclass 13 and indented subclasses for circular progressive shedding weaving machines.;

and in subclass 61, before "note. Search Classes", add:

Search this class, subclass—

56—and indented subclass, for braiding carriers with strand tensioning means.

In *class 89, Ordnance* (Division 22), subclass 31, add:

Search Class—

138—PIPES AND TUBULAR CONDUITS, subclass 89 and indented subclasses and the notes thereto, for closures or plugs for pipes and tubular conduits.

In *class 95, Photography* (Division 7), subclasses 5.2 and 5.4, cancel note (2) and substitute:

Search Class—

101—PRINTING, subclass 149, and the indented subclasses and see the notes thereto.

In *class 101, Printing* (Division 17), subclass 129, add:

Search this class, subclasses—

128.2, 128.3, and 128.4—for processes of manufacture of stencils even though a use step is claimed.

Search Class—

117—COATING: PROCESSES AND MISCELLANEOUS PRODUCTS, subclass 38, for non-uniform coating processes involving stenciling where no significant manipulative stenciling step is claimed; see note (4) to the definition of subclass 38 and the reference to class 101, PRINTING, in note (I) in the headnote of class 117, COATING: PROCESSES AND MISCELLANEOUS PRODUCTS for the line between class 117 and this class (101).;

in subclass 131, cancel the note and add:

Search this class, subclass—

149.4—for copying surfaces and processes of manufacture.;

in subclass 395, add:

Search this class, subclass—

149—for planographic printing plates and see notes.;

in subclass 401.3, in the subclass definition, change the period (.) to a comma (,) and add:—*also "make-readys" and processes of preparing and using them.*—; under "Search Classes", change the reference to class 41, Ornamentation, to read:

41—ORNAMENTATION, subclasses 24 and 25, for relief and intaglio reproduction provided therefor.;

and add:

204—CHEMISTRY, ELECTRICAL AND WAVE ENERGY, subclasses 4 and 6, for reproduction of surfaces by electrodeposition.;

and in subclass 407, add:

Search this class, subclass—

401.3—for "make-readys".

In *class 102, Ammunition and Explosive Devices* (Division 22), subclass 39, in note (1), change the "and" after "bombs" to a comma (,) and add: *and subclass 92, for projectiles having means for lubricating the gun barrel,*.

In *class 106, Compositions, Coating or plastic* (Divisions 38 and 64), main class definition, in note (1), cancel the references to classes 41, Ornamentation, and 101, Printing, and substitute for the reference to class 101, Printing:

101—PRINTING, subclass 127 and the indented subclasses for stencils; subclass 149 and subclass 149.2 for planographic printing surfaces; subclass 149.4 for copying surfaces; and subclasses 368 and 398, for printing members or type when there is no claim to the composition per se.;

in subclass 2, cancel note (2) and substitute:

Search Class—

101—PRINTING, subclass 130 and subclasses 135 to 146, for apparatus for printing dependent on the use of ink repellent surfaces, subclasses 149, 149.2, and 149.3, for plates, surfaces, processes and subclass 416 and indented subclasses, for anti-smut devices.;

and in subclass 19, cancel note (2).

In *class 109, Safes, Bank Protection and Related Devices* (Division 20), subclass 25, in note (2), change "subclass 20" to read *subclasses 20 and 29.*; and in subclass 29, add:

(2.5) Note.—See this class, subclass 25, for means for marking articles upon attack, usually to warn that the articles have been stolen.

In *class 117, Coating: Processes and Miscellaneous Products* (Division 38), main class definition, in Section I of the notes, under "Search Classes", in the reference to class 41, Ornamentation, in the last paragraph, cancel the second sentence and substitute:

Processes of broadly masking and applying a coating composition, are in this class (117). Processes which include specific manipulation of the mask or the use of specific masks are in class 41, ORNAMENTATION, see subclass 29.;

and in Section I, under "Search Classes", add:

86—AMMUNITION AND EXPLOSIVE-CHARGE MAKING, subclass 19, for coating processes peculiar to the treatment or preparation of ammunition and explosive devices.;

and in the reference to class 101, Printing, add:

Processes which include specific manipulation of the stencils or the use of specific stencils are in class 101, PRINTING, subclass 129.;

in the main class definition, in Section II of the notes, in the reference to class 41, Ornamentation, cancel "stencils, stencil blanks, copying surfaces," and immediately before the reference to class 108, add:

101—PRINTING, subclass 127 and indented subclasses for stencils and stencil blanks and subclass 149 and indented subclasses for copying surfaces, wherever these printing elements are not merely coated bases distinguished only by the coating material or a base of a particular material.

and in Section III of the main class definition, in the reference to class 18, second sentence, after "including", insert *molding followed by.*

In *class 132, Toilet* (Division 53), in subclass 75, add:

Search Class—
16—MISCELLANEOUS HARDWARE, subclass 110.5 and the notes thereto appended, for handles which also serve as receptacles.;

and in subclass 81, add:

Search Class—
16—MISCELLANEOUS HARDWARE, subclass 110.5 and the notes thereto appended, for handles which also serve as receptacles.

In *class 135, Tents, Canopies, Umbrellas, and Canes* (Division 53), subclass 47, change "(3) Search Classes" to *Search Classes,* and add:

16—MISCELLANEOUS HARDWARE, subclass 110.5 and the notes thereto appended, for handles which also serve as receptacles.

In *class 138, Pipes and Tubular Conduits* (Division 52), subclass 89, add:

(2A) Note.—For plugs or other devices for closing the gun muzzle or other opening in the barrel of a gun, see class 89, ORDNANCE, subclass 31.

In *class 139, Textiles, Weaving* (Division 21), subclass 13, add:

Search Class—
87—TEXTILES, BRAIDING, NETTING AND LACE MAKING, subclass 29 and subclass 33 and indented subclasses, for circular braiding machines.

In *class 145, Woodworking Tools* (Division 29), subclass 62, add:

Search Class—
16—MISCELLANEOUS HARDWARE, subclass 110.5 and the notes thereto appended, for handles which also serve as receptacles.

In *class 160, Closures, Partitions and Panels, Flexible and Portable* (Division 53), main class definition, add:

(4.5) Note.—For devices designed for covering a supporting surface to receive wear which would otherwise meet the definitions of this class, see classes:
20—WOODEN BUILDINGS, subclass 78 and indented subclasses, and subclass 79;
61—HYDRAULIC AND EARTH ENGINEERING, subclass 37 and indented subclass;
94—ROADS AND PAVEMENTS, subclass 13.

In *class 166, Wells* (Division 32), subclass 16, note (1), cancel the reference to 42, Firearms, subclass 91.

In *class 169, Fire-Extinguishers* (Division 46), subclass 4, cancel the note and substitute:

Search Classes—
21—PRESERVING, DISINFECTING, AND STERILIZING, subclass 60.5, for the use of fluid blankets as preservative means when the sole purpose is not fire extinguishing or preventing.
220—METALLIC RECEPTACLES, subclasses 88 and 89, for the prevention of fire in oil tanks.

In *class 184, Lubrication* (Division 45), main class definition, add:

Search Classes—
The following classes have the noted subclasses, which are classified on the basis of the lubrication of solid, relatively movable surfaces or the materials used therefor:
10—BOLT, NUT, NAIL, RIVET AND SCREW MAKING, subclass 106, for lubrication for screw threading machines and subclass 126, for oilers for screw threading die stocks.
16—MISCELLANEOUS HARDWARE, subclass 36, for caster lubricators and subclass 161, for hinge lubricators.
19—TEXTILES, FIBER PREPARATION, subclass 138.
25—PLASTIC BLOCK AND EARTHENWARE APPARATUS, subclasses 18 and 19 for liquid and steam lubricated expressing dies.
29—METAL WORKING, subclass 106, for metal cutting tool lubricators.
51—ABRADING, subclass 213, for rigid abrading tools with means to supply lubricant to the abrading surface.
57—TEXTILES, SPINNING, TWISTING AND TWINING, subclass 120 and subclass 133 and indented subclass.
73—MEASURING AND TESTING, subclass 280, for structure to oil volume or rate of flow meter diaphragms.
74—MACHINE ELEMENTS AND MECHANISMS, subclasses 230, 257, 467 and indented subclass, 587, and 605.
87—TEXTILES, BRAIDING, NETTING AND LACE MAKING, subclass 32.
112—SEWING MACHINES, subclasses 43 and 256.
123—INTERNAL COMBUSTION ENGINES, subclass 196.
143—WOOD SAWING, subclasses 29, 158, and 164, for lubrication of band-saw pulleys, saw blades, and saw guides, respectively.
145—WOODWORKING TOOLS, subclass 18, for bench plane lubricators.
152—RESILIENT TIRES AND WHEELS, subclass 2 and indented subclasses, for spring wheel lubrication.
188—BRAKES, subclass 264, for lubricating brake shoes, wheels, or drums.
192—CLUTCHES AND POWER STOP CONTROL, subclass 113, for clutch lubricating.
205—METAL DRAWING, subclass 19, for lubricating of wire passing through reducing-dies.
230—GAS PUMPS AND FANS, subclass 206 and indented subclass.
251—VALVES, subclass 93, for rotary plug type lubricating.
252—COMPOSITIONS, subclass 9 and indented subclasses, for lubricants.
267—SPRING DEVICES, subclasses 37 and 50.
286—PACKED SHAFT OR ROD JOINTS, subclass 5 and indented subclass.
308—MACHINE ELEMENTS, BEARINGS AND GUIDES, subclass 5, subclass 76 and indented subclass, subclass 78 and indented subclasses, subclass 168 and indented subclasses, subclass 187, and subclasses 240 through 243.
309—MACHINE ELEMENTS, CYLINDERS AND PISTONS, subclass 6 and indented subclasses and subclass 45.

In *class 198, Conveyers—Power-Driven* (Division 4), subclass 128, add:

(1.5) Note.—See class 34, DRYING AND GAS OR VAPOR CONTACT WITH SOLIDS, subclass 58, and notes for search for devices subjecting material to centrifugal force.

In *class 204, Chemistry, Electrical and Wave Energy* (Division 56), subclass 4, cancel the notes and substitute:

Search Classes—
41—ORNAMENTATION, subclass 25, for reproducing relief and intaglio surfaces in general.
101—PRINTING, subclass 401.3 for "make-readys" and their preparation by processes other than by electrodeposition.
117—COATING: PROCESSES AND MISCELLANEOUS PRODUCTS, for the formation of a metallic or nonmetallic conducting coat preparatory to the electrolytic method when claimed alone.

In *class 212, Traversing Hoists* (Division 4), subclass 140, in the definition, change the last comma (,) to a period (.) and cancel the remainder of the sentence.

In *class 214, Material or Article Handling* (Division 4), subclass 98, cancel note (1) and the numeral (2) of note (2).

In *class 220, Metallic Receptacles* (Division 40), main class definition, add:

(2.5) Note.—For handles which also serve as receptacles, see class 16, MISCELLANEOUS HARDWARE, subclass 110.5 and the notes thereto.

In *class 226, Filling and Closing Portable Receptacles* (Division 35), subclass 20, add:

(0.5) Note.—This class, subclass 68, for patents for applying gas to filled containers and combinations of filling with both gaseous and non-gaseous fluent material.

and in subclass 109, at the end of note (1), add:

Where the air is displaced by another gas, see subclass 68.

In *class 237, Heating Systems* (Division 30), subclass 19, cancel note (1) and the numeral (2) before "Search Classes".

In *class 242, Winding and Reeling* (Division 61), subclass 147, under "(2) Search Classes", cancel the reference to class 96, and substitute:

87—TEXTILES, BRAIDING, NETTING AND LACE MAKING, subclass 56 and indented subclass and subclass 61.

In *class 252, Compositions* (Divisions 3 and 64), main class definition, under "(6) Search Classes", add:

60—POWER PLANTS, main class definition, note (7) to class 252, COMPOSITIONS, for the line.
62—REFRIGERATION, main class definition, under "(3) Search Classes", see the note to class 252, COMPOSITIONS for the line.
257—HEAT EXCHANGE, main class definition, under "(2) Search Classes", see the note to class 252, COMPOSITIONS, for the line.;

in subclass 2, add:

Search this class, subclass—
381—and indented subclasses, and class 75, METALLURGY, subclass 96, for compositions for forming protective coatings, layers, or zones for excluding air or other substances.;

in subclass 68, note (1), change "379" to *408*; in subclass 142, change "and" to a comma (,) and after "136" add— *and 193*—; in subclass 156, add:

Search this class, subclass—
189—and indented subclasses.;

in subclass 189, add:

Search this class, subclass—
156—and indented subclasses.;

in subclass 193, in note (1), before "179", insert: *142 and indented subclasses and subclass;* and in subclass 381, note (2), add:

75—METALLURGY, subclass 96, for compositions for forming protective coatings, layers or zones for excluding air or other substances.

In *class 260, Chemistry, Carbon Compounds* (Division 6), subclass 475, cancel the note and substitute:

Note.—This subclass also includes aromatic polycarboxylic acid esters wherein any unesterified carboxyl group has been converted into a functional derivative thereof, such as, for example, a salt or acid halide; however, those compounds wherein a carboxyl group has been reacted to form an amido or an amine-addition radical are found in subclasses 471 and 472.

and in subclass 485, in the definition, change "amide" to *acid halide.*

In *class 287, Rod Joints or Couplings* (Division 52), main class definition, note (4), cancel the reference to 42, Firearms, subclass 92.

In *class 288, Joint Packings* (Division 52), main class definition, under "9" in (1) note, cancel the reference to class 96 and substitute:

87—Textiles, Braiding, Netting and Lace Making.

In *class 294, Handling—Hand and Hoist-Line Implements* (Division 4), subclass 19, note (1), cancel the reference to 42, Firearms, subclass 91, and add in the reference to class 15, *subclass 104.05 and indented subclasses,*; and in subclass 93, note (4), cancel the reference to 42, Firearms, subclass 95 and add under class 81, Tools, *subclass 3.05,*.

TRADE-MARKS

OFFICIAL GAZETTE, FEBRUARY 9, 1943

[Vol. 547. No. 2]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

RAW OR PARTLY PREPARED MATERIALS

Ser. No. 456,542. Pennsylvania Coal Products Company, Petrolia, Pa. Filed Oct. 30, 1942.

PENACOL

PENACOLITE

FOR SYNTHETIC RESINS, ORGANIC RESINOUS CONDENSATION PRODUCTS, POLYHYDROXY-BENZENE RESIN CONDENSATION PRODUCTS, RESORCIN RESIN CONDENSATION PRODUCTS, RESINOUS COMPOSITIONS, SYNTHETIC RESIN AND RESINOUS BONDING COMPOSITIONS.

Claims use since Oct. 11, 1941, for composite mark; and since Jan. 24, 1922, for word "Penacol."

CLASS 2

RECEPTACLES

Ser. No. 456,920. Dritz-Traum Company, Inc., New York, N. Y. Filed Nov. 19, 1942.

BILLET BAG

No claim is made to the word "Bag" apart from the mark.

FOR COMBINATION CONSISTING OF A LAUNDRY BAG AND A CONTAINER EQUIPPED WITH POCKETS ON ONE SIDE FOR HOLDING SHIRTS, TOILET ACCESSORIES, HANDKERCHIEFS, SOCKS, AND UNDERWEAR TOGETHER WITH A LARGE-SIZED POCKET AT THE BOTTOM FOR GENERAL UTILITY, WHICH CONTAINER CAN BE HUNG ON A HOOK AND SERVE AS A WARDROBE, ROLLED UP AND SERVE AS A KIT BAG, OR BE PACKED INTO A DUFFEL BAG.

Claims use since Oct. 29, 1942.

Ser. No. 456,961. Marjorie M. Rohdin, Glen Ridge, N. J. Filed Nov. 21, 1942.

HYDRATITE BAG

The word "Bag" is disclaimed apart from the mark.

FOR FLEXIBLE WALLED BAGS FORMED OF FILMS SOLD UNDER THE TRADE NAMES "CELLOPHANE", PLIOFILM", KAROSEAL", AND "VINYLITE", AS WELL AS FROM GLASSINE, POLYVINYL ALCOHOL, COATED AND UNCOATED PAPER AND VEGETABLE PARCHMENT, SINGLY OR IN COMBINATION.

Claims use since June 29, 1942.

CLASS 3

BAGGAGE, ANIMAL EQUIPMENTS, PORTFOLIOS, AND POCKETBOOKS

Ser. No. 456,532. Almeida Harris, New York, N. Y. Filed Oct. 30, 1942.

V•••—

FOR COLLAPSIBLE BAGS MADE OF CANVAS OR CLOTH FOR CARRYING GOODS, MERCHANDISE, AND WARES WHEN SHOPPING.

Claims use since Oct. 24, 1942.

Ser. No. 456,888. Max H. Hunziker, New York, N. Y. Filed Nov. 18, 1942.

ORIGINAL BY Maxim

The words "Original By" are disclaimed apart from the mark.

FOR LADIES' HANDBAGS, PURSES, BILLFOLDS, AND KIT BAGS.

Claims use since Jan. 19, 1942.

Ser. No. 457,262. Wilson Manufacturing Co., Boston, Mass. Filed Dec. 7, 1942.

The

BERKELY

FOR POCKETBOOKS, BILLFOLDS AND COMBINED PASS CASE, AND BILLFOLDS.

Claims use since Nov. 12, 1942.

CLASS 4

ABRASIVE, DETERGENT, AND POLISHING MATERIALS

Ser. No. 449,151. Philco Corporation, Philadelphia, Pa. Filed Dec. 3, 1941.

PHILCO

FOR SANDPAPER—NAMELY, A MATERIAL USED IN CABINET WORK TO BUILD UP AND REMOVE SURFACE DENTS OR ABRASIONS; AND RUBBING COMPOUND—NAMELY, A MATERIAL CONTAINING AN ABRASIVE USED TO REDUCE FINISHED SURFACES OF WOOD.

Claims use since January, 1937, on rubbing compound; and since 1934 on sandpaper.

Ser. No. 456,439. Sugar Beet Products Company, Saginaw, Mich. Filed Oct. 26, 1942.

SBS-11

FOR POWDERED HAND SOAP.
Claims use since Oct. 20, 1936.

Ser. No. 456,639. Alfred D. McKelvy Company, New York, N. Y. Filed Nov. 4, 1942.

RANGER

FOR TOILET KIT CONTAINING SOAP.
Claims use since Oct. 26, 1942.

Ser. No. 456,641. United States Pumice Supply Co., Los Angeles, Calif. Filed Nov. 4, 1942.

"Grill Master"

No claim is made to the word "Grill" apart from the mark.

FOR BLOCKS OF NATURAL PUMICE STONE USED FOR SCRAPING, SCOURING, AND POLISHING THE TOPS OF STOVE GRILLS AND THE LIKE.

Claims use since July 13, 1942.

Ser. No. 456,642. United States Pumice Supply Co., Los Angeles, Calif. Filed Nov. 4, 1942.

SANI-STONE

No claim is made to the word "Stone" apart from the mark.

FOR BLOCKS OF NATURAL PUMICE STONE FOR SCRAPING, SCOURING, AND POLISHING POTS, PANS, KETTLES, AND OTHER METAL UTENSILS.

Claims use since Sept. 21, 1942.

CLASS 6

CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS

Ser. No. 445,385. Eastman Kodak Company, Jersey City, N. J., and Rochester, N. Y. Filed July 16, 1941.

D-11

FOR PHOTOGRAPHIC DEVELOPERS.
Claims use since Feb. 24, 1937.

Ser. No. 454,556. The Lannett Company, Incorporated, Philadelphia, Pa. Filed July 28, 1942.

CASTADERM

FOR DERMATOLOGICAL PREPARATION.
Claims use since Nov. 1, 1941.

Ser. No. 455,445. Paul J. Simmons, doing business as Simmons Company, New York, N. Y. Filed Sept. 9, 1942.

MANEX

FOR MEDICINAL TONICS USED AS GENERAL TONICS TO TONE UP THE BODY.

Claims use since November, 1941.

Ser. No. 456,950. Rose Warfield, doing business as C Y C Products Co., Chicago, Ill. Filed Nov. 20, 1942.

CYC

FOR LIQUID COUGH MEDICINE TO BE TAKEN INTERNALLY.

Claims use since Oct. 25, 1941.

Ser. No. 457,277. Lehn & Fink Products Corporation, Bloomfield, N. J. Filed Dec. 8, 1942.

ESTRELLITA

FOR PERFUME AND EAU DE COLOGNE.
Claims use since Aug. 20, 1942.

Ser. No. 457,286. The Rubber City Manufacturing Co., Akron, Ohio. Filed Dec. 8, 1942.

Florex

FOR CHEMICAL DYE PREPARATION.
Claims use since April, 1941.

Ser. No. 457,519. MARK VANDEWART COMPANY INC., New York, N. Y. Filed Dec. 18, 1942. Under 10-year proviso.

Van de Wart

FOR STOMACH BITTERS.
Claims use since 1880.

Ser. No. 457,577. LES PARFUMS WORTH DE PARIS, INC., New York, N. Y. Filed Dec. 23, 1942.

SPOTLIGHT

FOR PERFUME, TOILET WATER, EAU DE COLOGNE, FACE AND DUSTING POWDER, TALC, LIPSTICK.
Claims use since Dec. 17, 1942.

Ser. No. 457,597. AR-JAY LABORATORIES, INC., Ontario, Calif. Filed Dec. 26, 1942.

AR·JAY

FOR OIL SHAMPOOS, TAR SHAMPOO, EUCALYPTUS SHAMPOO, PINE NEEDLES SHAMPOOS, DANDRUFF REMOVER SHAMPOO, LIQUID COLOR RINSES, CONCENTRATED NEUTRAL RINSES, LEMON RINSE, WAVE-SET PREPARATION, HAIR LACQUER, AND BLUING FOR THE HAIR.
Claims use since June 26, 1931.

CLASS 12

CONSTRUCTION MATERIALS

Ser. No. 449,256. THE FLINTKOTE COMPANY, New York, N. Y. Filed Dec. 8, 1941.

C. P.

Applicant is the owner of the trade-mark registered by Registration Certificate No. 398,682, dated Nov. 17, 1942.
FOR BITUMINOUS ROOF INSULATION CEMENT.
Claims use since January, 1941.

Ser. No. 456,270. KANSAS BUILDING MATERIALS COMPANY, Topeka, Kans. Filed Oct. 19, 1942.

MARVEL-KOTE

The word "Kote" is disclaimed apart from the mark.
FOR CONCRETE CURING COMPOUND.
Claims use since Sept. 4, 1942.

Ser. No. 456,512. THE RUBEROID CO., Boundbrook, N. J., and New York, N. Y. Filed Oct. 29, 1942.

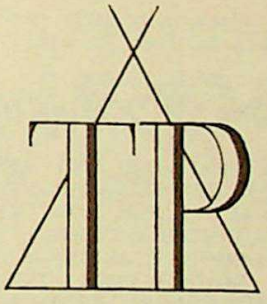
CALSILITE

FOR THERMAL INSULATION MATERIAL.
Claims use since Apr. 24, 1942.

Ser. No. 456,516. STANDARD COTTON PRODUCTS CO., INC., Flint, Mich. Filed Oct. 29, 1942.

Applicant disclaims the words "Standard Cotton Insulation" and "Resists Heat Cold and Fire" apart from the mark.
FOR INSULATION BATTS.
Claims use since May, 1942.

Ser. No. 456,850. THE HOLSTEIN RUBBER PRODUCTS COMPANY, INC., Hartford, Conn. Filed Nov. 16, 1942.



Thermo Plastic

Applicant disclaims the words "Thermo Plastic" apart from the mark.
FOR FLOOR TILES.
Claims use since Apr. 11, 1942.

Ser. No. 456,945. LOCKPORT COTTON BATTING CO., Lockport, N. Y. Filed Nov. 20, 1942.

Lo-K

FOR FIREPROOFED COTTON SHEET INSULATION MATERIAL.
Claims use since Sept. 5, 1942.

Ser. No. 456,972. ROBERT CONNELL AND S. I. WILSON, Portland, Oreg. Filed Nov. 23, 1942.

INSUL-MIX

Applicant disclaims the word "Mix" apart from the mark.
FOR WATERPROOFING COMPOSITION FOR MIXING WITH CEMENT.
Claims use since June 15, 1942.

CLASS 13

HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES

Ser. No. 446,434. National Enameling & Stamping Company, Milwaukee, Wis. Filed Aug. 21, 1941.

ROYAL

Applicant is the owner of trade-mark registration No. 129,193, registered Jan. 27, 1920, and renewed.

FOR METAL COOKING HOLLOW WARE THE SURFACES OF WHICH ARE EITHER ENAMELED, TINNED, GALVANIZED, OR UNCOATED, AND METAL KITCHENWARE THE SURFACES OF WHICH ARE EITHER ENAMELED, TINNED, GALVANIZED, OR UNCOATED—NAMELY, DISH PANS, WASH BOWLS, PITCHERS, SINK DRAINERS, BABY BATHS, MIXING BOWLS, SOUP BOWLS, SAUCERS, DINNER PLATES, COFFEE BIGGINS, COLANDERS, FUNNELS, PIE PLATES, SALT AND PEPPER SETS, TRAYS, DUST PANS, AND FRUIT JAR FILLERS.

Claims use since Nov. 1, 1905.

Ser. No. 452,309. Everett N. McDonnell, doing business as McDonnell & Miller, Chicago, Ill. Filed Apr. 13, 1942.

"Doing One M&M Thing Well"

FOR BOILER CONTROLS AND REGULATORS—NAMELY, LIQUID LEVEL RESPONSIVE BOILER WATER FEED VALVES FOR LOW, MEDIUM, AND HIGH PRESSURE BOILERS, COMBINATION LIQUID LEVEL RESPONSIVE BOILER WATER FEED VALVES AND LOW WATER FUEL CUT-OFF SWITCHES, HIGH OR LOW LIQUID LEVEL REGULATOR VALVES, CONSTANT LEVEL VALVES FOR OIL BURNERS, SAFETY RELIEF VALVES, HUMIDIFIER WATER CONTROL VALVES, LIQUID LEVEL RESPONSIVE SOLVENT STILL REGULATOR VALVES FOR USE WITH CLEANING AND DYEING EQUIPMENT, AND VALVE AND FLOAT PARTS.

Claims use since Dec. 22, 1924.

Ser. No. 453,024. J. A. Zurn Manufacturing Company, Erie, Pa. Filed May 14, 1942.

GREASEPTOR

FOR GREASE TRAPS.

Claims use since Oct. 15, 1930.

Ser. No. 455,990. United-Carr Fastener Corporation, Cambridge, Mass. Filed Oct. 5, 1942.

AIRLOC

FOR SEPARABLE FASTENERS PARTICULARLY OF THE ROTARY OPERATIVE TYPE VARIOUSLY APPLIED TO ARTICLES OF MANUFACTURE IN THE INDUSTRIAL ARTS.

Claims use since January, 1942.

Ser. No. 456,073. The Fairbanks Company, New York, N. Y. Filed Oct. 8, 1942.

FAIRCOSEAL

FOR PLUMBING AND STEAMFITTING VALVES.

Claims use since Sept. 3, 1942.

Ser. No. 456,299. Zallea Brothers & Johnson, Wilmington, Del. Filed Oct. 20, 1942.

'Code-Craft'

FOR PIPE EXPANSION JOINTS, METAL PIPING, AND VALVES OF THE FOLLOWING TYPES—TO WIT, GLOBE, GATE, CROSS, ANGLE, STOP, CHECK, STOP-AND-CHECK, SWING-CHECK, LIFT-CHECK AND MANIFOLD, WHICH LATTER INCLUDES VARIOUS COMBINATIONS OF THE FOREGOING TYPES OF VALVES.

Claims use since June, 1939.

Ser. No. 456,384. Faultless Caster Corporation, Evansville, Ind. Filed Oct. 24, 1942.

PLASKITE

FOR CASTER WHEELS.

Claims use since Oct. 7, 1942.

Ser. No. 456,586. Chicago Flexible Shaft Company, Chicago, Ill. Filed Nov. 2, 1942.

RainKing

FOR LAWN SPRINKLERS, HOSE NOZZLES, HOSE COUPLINGS, AND QUICK COUPLING VALVES.

Claims use on lawn sprinklers, since 1922; on hose nozzles, since 1925; on hose couplings, since 1927; and on quick coupling valves, since 1933.

CLASS 14

METALS AND METAL CASTINGS AND FORGINGS

Ser. No. 453,384. The International Nickel Company, Inc., New York, N. Y. Filed May 30, 1942.

L

FOR SHEET, STRIP, AND WIRE-RODS—NAMELY, THOSE MADE OF NICKEL AND NICKEL ALLOYS INCLUDING CARBON-FREE NICKEL.

Claims use since Jan. 29, 1942.

Ser. No. 456,505. Electro Metallurgical Company, New York, N. Y. Filed Oct. 29, 1942.

SILCAZ

FOR FERROUS METAL ALLOYS.

Claims use since Oct. 31, 1939.

CLASS 15

OILS AND GREASES

Ser. No. 450,119. SULFLO, INC., Elizabeth, N. J. Filed Jan. 9, 1942.

ALCUT

FOR METAL CUTTING LUBRICATING COMPOUND.
Claims use since May 15, 1940.

Ser. No. 450,120. SULFLO, INC., Elizabeth, N. J. Filed Jan. 9, 1942.

KERSOL

FOR METAL CUTTING LUBRICATING COMPOUND.
Claims use since Nov. 2, 1939.

Ser. No. 450,128. SULFLO, INC., Elizabeth, N. J. Filed Jan. 9, 1942.

ZERO-CUT

The word "Cut" is disclaimed apart from the mark.
FOR METAL CUTTING LUBRICATING COMPOUND.
Claims use since Mar. 8, 1940.

Ser. No. 457,376. UNION OIL COMPANY OF CALIFORNIA, Los Angeles, Calif. Filed Dec. 12, 1942.

DESLEX

FOR LUBRICATING OILS.
Claims use since May 1, 1942.

CLASS 16

PAINTS AND PAINTERS' MATERIALS

Ser. No. 454,608. PHILCO CORPORATION, Philadelphia, Pa. Filed July 30, 1942.

PHILCO

FOR LACQUERS, STAINS, PAINT THINNERS, FILLERS USED FOR PREPARING SURFACES TO BE PAINTED, READY MIXED PAINTS, PREPARED SHELLACS, VARNISHES, CABINET POLISH, BURN-IN-WAX, AND REFRIGERATOR POLISH.

Claims use upon lacquers, stains, thinners, fillers, paints, shellacs and varnishes since the year 1928; upon cabinet polish since the year 1933; upon refrigerator polish since January, 1939; and upon burn-in-wax since 1934.

Ser. No. 456,365. GEORGIA KAOLIN COMPANY, Elizabeth, N. J. Filed Oct. 23, 1942.

ALSITE

FOR CLAYS USED AS EXTENDERS IN PROTECTIVE PAINT COATINGS.
Claims suse since October, 1934.

Ser. No. 456,758. THE TREMCO MANUFACTURING COMPANY, Cleveland, Ohio. Filed Nov. 11, 1942.

TREMFLAT

FOR READY-MIXED PAINT.
Claims use since Apr. 16, 1942.

CLASS 19

VEHICLES, NOT INCLUDING ENGINES

Ser. No. 455,621. CROASDALE & DEANGELIS, Haverford Township, Pa. Filed Sept. 19, 1942.

CRYSTALEX

FOR WINDSHIELDS OF TRANSPARENT MATERIAL NOT INCLUDING GLASS.
Claims use since October, 1941.

CLASS 21

ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES

Ser. No. 457,197. BURNDY ENGINEERING COMPANY, INC., New York, N. Y. Filed Dec. 4, 1942.

VERSI

FOR ELECTRICAL CONNECTORS.
Claims use since July, 1940.

CLASS 22

GAMES, TOYS, AND SPORTING GOODS

Ser. No. 454,219. PARKER BROTHERS INC., Portland, Maine, and Salem, Mass. Filed July 14, 1942.

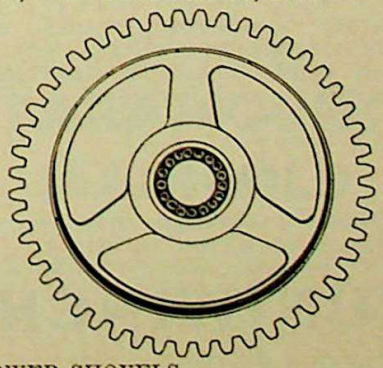
DIABOLO

FOR GAME PLAYED WITH A SPINNING BOBBIN.
Claims use since 1907.

CLASS 23

CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF

Ser. No. 444,842. UNIVERSAL UNIT POWER SHOVEL CORP., Milwaukee, Wis. Filed June 25, 1941.



FOR POWER SHOVELS.
Claims use since Jan. 2, 1930.

Ser. No. 449,421. KEARNEY & TRECKER CORPORATION, West Allis, Wis. Filed Dec. 12, 1941.

FULLBACK

FOR CUTTERS FOR MACHINE TOOLS.
Claims use since Mar. 15, 1931.

Ser. No. 454,609. PHILCO CORPORATION, Philadelphia, Pa. Filed July 30, 1942.

PHILCO

FOR FIBRE WRENCHES, WRENCH SOCKETS, SCREW DRIVERS, HEX HEAD ALIGNING TOOLS, GLAND NUT WRENCHES, COMBINATION ALIGNING SCREW DRIVERS AND WIRE DRESSING TOOLS, BURN-IN KNIVES, STATION SETTING WRENCHES, COIL SHIELD REMOVERS, RATCHET WRENCHES, OFFSET WRENCHES, TUBE REMOVERS, FELT RUBBING BLOCKS FOR FINISHING CABINETS AND EYELETTING SETS USED FOR EXAMPLE FOR FASTENING RADIO TUBE BASES TO PANELS.

Claims use on fibre wrenches since the year 1928; on wrench sockets since the year 1931; on screw drivers, hex head aligning tools since the year 1932; on gland nut wrenches, combination aligning screw drivers and wire dressing tools, burn-in knives since the year 1936; on station setting wrenches, and coil shield removers since the year 1937; on ratchet wrenches, offset wrenches, and tube removers since the year 1940; on felt rubbing blocks for finishing cabinets since the year 1938; and on eyeletting sets since 1935.

Ser. No. 456,584. CHICAGO FLEXIBLE SHAFT COMPANY, Chicago, Illinois. Filed Nov. 2, 1942. Under section 5b of the act of 1905 as amended in 1920.

STEWART

Applicant is owner of Reg. No. 64,351 (renewed) for the mark Stewart effected under the 10-year proviso.

FOR GROUP A: ANIMAL SHEARING MACHINES, ANIMAL CLIPPING MACHINES, HAND-PIECES FOR SHEARING AND CLIPPING MACHINES, COMBS AND CUTTERS FOR SHEARING AND CLIPPING MACHINES, FLEXIBLE SHAFTS; GROUP B: CLIPPERS FOR HUMAN HAIR; GROUP C: DOUBLE END GRINDERS, LINE SHAFT OUTFITS; GROUP D: BELT DRIVEN GEARS FOR SHEARING MACHINES; GROUP E: POSITIVE DRIVE GEARS FOR SHEARING MACHINES, HORIZONTAL DISC GRINDERS.

Claims use on the goods in Group A, since 1893; Group B, since 1898; Group C, since 1900; Group D, since 1922; and Group E, since 1938.

Ser. No. 456,776. LAKE SHORE ENGINEERING COMPANY, Iron Mountain, Mich. Nov. 12, 1942.

UNIWINCH

FOR CARGO WINCHES.
Claims use since Nov. 9, 1942.

Ser. No. 457,392. HUTCHENS INDUSTRIES, Eau Claire, Wis. Filed Dec. 14, 1942.

RED WHIZ

FOR OIL FILTERS AND PARTS THEREOF.
Claims use since Oct. 1, 1942.

CLASS 26

MEASURING AND SCIENTIFIC APPLIANCES

Ser. No. 447,672. GERTRUD SALVATORI, doing business as Contact Lens Service, New York, N. Y. Filed Oct. 10, 1941.

The portrait is fanciful. The words "Invisible Glasses" and "Contact Lens Service" are disclaimed apart from the mark.

FOR CONTACT LENSES.
Claims use since Sept. 15, 1941.

Ser. No. 457,177. TOLEDO SCALE COMPANY, Toledo, Ohio. Filed Dec. 2, 1942.

TRUCKMASTER

FOR WEIGHING SCALES.
Claims use since Oct. 5, 1942.

Ser. No. 457,284. REMINGTON RAND INC., Buffalo, N. Y. Filed Dec. 8, 1942.

STYLISCOPE

FOR DRAWING FIXTURE FOR SUPPORTING DUPLICATOR STENCILS.
Claims use since July 17, 1941.

CLASS 29

BROOMS, BRUSHES, AND DUSTERS

Ser. No. 456,133. STANLEY HOME PRODUCTS, INC., Westfield, Mass. Filed Oct. 10, 1942.

STANITE

FOR HAIR AND TOOTH BRUSHES.
Claims use since November, 1936.

CLASS 33

GLASSWARE

Ser. No. 452,233. GLASCO PRODUCTS COMPANY, Chicago, Ill. Filed Apr. 3, 1942.

GLASCO

FOR GLASS RODS, GLASS TUBES AND GLASS CONTAINERS—NAMELY, JARS, DISHES, AND BOTTLES, INCLUDING AMPOULES AND OTHER VIALS, AND FLASKS.
Claims use since Dec. 9, 1929.

Ser. No. 454,378. PHILCO CORPORATION, Philadelphia, Pa. Filed July 21, 1942.

PHILCO

FOR GLASS TRAYS AND GLASS SHELVING.
Claims use since January, 1939.

Ser. No. 456,218. MCKEE GLASS COMPANY, Jeannette, Pa. Filed Oct. 15, 1942.

Range-tec
TOP OF STOVE WARE

The words "Top Of Stove Ware" are disclaimed apart from the mark.
FOR GLASS DISH.
Claims use since May 23, 1942.

CLASS 34

HEATING, LIGHTING, AND VENTILATING APPARATUS

Ser. No. 445,680. BORG-WARNER CORPORATION, Chicago, Ill. Filed July 28, 1941.

HYTEMP

FOR FLUID AND SOLID FUEL BURNING FURNACES GENERALLY OF THE CLASS FORMING PART OF BUILDING HEATING EQUIPMENT.
Claims use since Mar. 11, 1941.

Ser. No. 445,681. BORG-WARNER CORPORATION, Chicago, Ill. Filed July 28, 1941.

RAYTEMP

FOR FLUID AND SOLID FUEL BURNING FURNACES GENERALLY OF THE CLASS FORMING PART OF BUILDING HEATING EQUIPMENT.
Claims use since Mar. 11, 1941.

CLASS 35

BELTING, HOSE, MACHINERY PACKING, AND NONMETALLIC TIRES

Ser. No. 453,713. CORNING GLASS WORKS, Corning, N. Y. Filed June 17, 1942.

VYCOR

FOR ROTATING SEAL RINGS FOR CENTRIFUGAL PUMPS AND SIMILAR ROTATING EQUIPMENT.
Claims use since May 14, 1940.

CLASS 36

MUSICAL INSTRUMENTS AND SUPPLIES

Ser. No. 449,447. DUOTONE COMPANY, INC., New York, N. Y. Filed Dec. 13, 1941.

Duotone

The representation of the needle is disclaimed apart from the mark.
FOR PHONOGRAPH NEEDLES.
Claims use since May 29, 1940.

Ser. No. 452,687. DUOTONE COMPANY, New York, N. Y. Filed Apr. 30, 1942.

MIRO POINT

The word "Point" is disclaimed apart from the mark.
FOR PHONOGRAPH NEEDLES.
Claims use since Jan. 1, 1942.

CLASS 37

PAPER AND STATIONERY

Ser. No. 446,837. GEORGE J. HODDER, Oakland, Calif. Filed Sept. 6, 1941.

TOUR — A — NOTE

The word "Note" is disclaimed apart from the mark.
FOR NOTE PAPER IN THE NATURE OF FOLDERS.
Claims use since Aug. 26, 1941.

Ser. No. 454,822. BUTLER PAPER CORPORATION, Chicago, Ill. Filed Aug. 10, 1942.

PARAMOUNT MANIFOLD

The word "Manifold" is disclaimed apart from the mark.
FOR WRAPPING PAPER, MANILA PAPER, ENVELOPES, PRINT BOOK COVER, DOCUMENT COVERS, AND MANIFOLD OR ONION SKIN PAPER.
Claims use since June, 1919, on wrapping paper, manila paper, envelopes, print book cover and document covers; and since January, 1942, on manifold or onion skin paper.

Ser. No. 455,045. J. R. BRUNDAGE, INC., New York, N. Y. Filed Aug. 22, 1942.

FOR WRITING PAPER AND ENVELOPES.
Claims use since May, 1940.

CLASS 38

PRINTS AND PUBLICATIONS

Ser. No. 457,167. CHICAGO TRIBUNE-NEW YORK NEWS SYNDICATE, INC., New York, N. Y. Filed Dec. 2, 1942.

DEATHLESS DEER

FOR A SERIES OF CARTOONS.
Claims use since Nov. 9, 1942.

CLASS 39

CLOTHING

Ser. No. 443,653. COLLEGIATE MANUFACTURING COMPANY, INC., New York, N. Y. Filed May 17, 1941.

Fluff-Down

FOR PAJAMAS, NIGHTGOWNS, SLIPS, PANTIES, VESTS, HOUSECOATS, NEGLIGEES, AND ROBES.
Claims use since July 18, 1939.

Ser. No. 449,247. ARTISTOC, LIMITED, Nottinghamshire, England. Filed Dec. 8, 1941.

NYLOSTOC

FOR SOCKS (FOR WEAR) AND STOCKINGS, ALL MADE WHOLLY OR PRINCIPALLY OF NYLON.
Claims use since April, 1941.

Ser. No. 455,655. HAMMER-SICES, INC., Chicago, Ill. Filed Sept. 21, 1942.

Bobby Burns

The trade-mark is the familiar appellation of the celebrated Scottish poet, Robert Burns, now deceased.
FOR LADIES' AND MISSES' COATS.
Claims use since January, 1933.

Ser. No. 457,179. WHELLKIN COAT COMPANY, INC., New York, N. Y. Filed Dec. 2, 1942.

LARNAC

FOR SUITS, COATS, AND SPORT COATS FOR LADIES.
Claims use since Nov. 10, 1942.

Ser. No. 457,229. QUEEN ANNE UNDIES, INC., New York, N. Y. Filed Dec. 5, 1942.

Lovely Me

FOR LADIES' APPAREL—NAMELY, SLIPS, NIGHTGOWNS, PAJAMAS, BLOOMERS, CHEMISES, BRASSIÈRES, NEGLIGEES, PETTICOATS, UNDERVESTS, AND UNDERSHIRTS.
Claims use since July 1, 1942.

CLASS 42

KNITTED, NETTED, AND TEXTILE FABRICS

Ser. No. 454,124. SOUTHERN MILLS, INCORPORATED, Atlanta, Ga. Filed July 9, 1942.

The portrait is fanciful.
FOR COTTON FLANNEL, KNITTED COTTON PADDING, COTTON COVER CLOTH IN THE FORM OF WIDE SHEETING, DUCK, AND SATEEN ALL IN THE PIECE, BOLT, OR ROLL.
Claims use since January, 1929.

Ser. No. 455,733. SAMUEL PERLMUTTER, doing business as Empire Curtain Mfg. Co., Boston, Mass. Filed Sept. 24, 1942.

Pongenese CURTAINS

Applicant disclaims the word "Curtain."
FOR WINDOW CURTAINS, DRAPERIES, AND BEDSPREADS.
Claims use since Jan. 30, 1941.

CLASS 45

BEVERAGES, NONALCOHOLIC

Ser. No. 457,233. MAX AMS, INC., New York, N. Y. Filed Dec. 7, 1942.

AirlinE

FOR PRUNE JUICE FOR BEVERAGE PURPOSES.
Claims use since Nov. 3, 1911.

CLASS 46

FOODS AND INGREDIENTS OF FOODS

Ser. No. 449,891. BURNETT'S INCORPORATED, Newark, N. J. Filed Dec. 31, 1941.

PEP

Applicant is owner of trade-mark registration No. 162,695, dated Dec. 26, 1922.
FOR TONIC FOOD IN BISCUIT FORM FOR BIRDS.
Claims use since 1910.

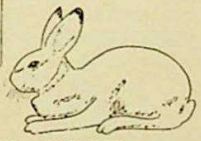
Ser. No. 456,287. HAPPY MILLS, Memphis, Tenn. Filed Oct. 20, 1942.

HAPPY

FOR FEED FOR LIVESTOCK, POULTRY, RABBITS, DOGS, AND PIGEONS.
Claims use since 1921.

Ser. No. 456,710. JOHN T. BUNN, doing business as Crown Packing Company, Los Angeles, Calif Filed Nov. 9, 1942.

Bunny



Applicant is owner of Reg. No. 193,546.
FOR FRESH VEGETABLES—NAMELY, FRESH CELERY, LETTUCE, MELONS.
Claims use since July 3, 1923.

Ser. No. 457,201. FOOD MACHINERY CORPORATION, San Jose, Calif. Filed Dec. 4, 1942. Under the act of February 20, 1905, as amended June 10, 1938.

Flavorseal

FOR POTATOES.
Claims use since June 8, 1942.

Ser. No. 457,234. BAY SHORE CANNING COMPANY, Alviso, Calif. Filed Dec. 7, 1942.

ARM IN ARM

FOR CANNED VEGETABLES AND FRUITS.
Claims use since Aug. 10, 1942.

Ser. No. 457,246. KELLOGG COMPANY, Battle Creek, Mich. Filed Dec. 7, 1942.

FOR FOOD FOR DOGS AND OTHER CARNIVOROUS ANIMALS.
Claims use since Oct. 26, 1942.

Ser. No. 457,278. WM. MONTGOMERY COMPANY, Philadelphia, Pa. Filed Dec. 8, 1942.

LITTLE·BUTCH

FOR CANNED DOG FOOD.
Claims use since Nov. 9, 1942.

Ser. No. 457,359. B. T. BABBITT, INC., Albany and New York, N. Y. Filed Dec. 12, 1942.

AUNT POLLY'S

FOR DEHYDRATED SOUP MIXTURES—NAMELY, BEEF NOODLE, CHICKEN NOODLE, VEGETABLE NOODLE, YANKEE BEAN, SPLIT GREEN PEA, AND OLD FASHIONED POTATO.
Claims use since Nov. 25, 1942.

Ser. No. 457,540. CALIFORNIA FRUIT PROCESSORS, INC., San Francisco, Calif. Filed Dec. 21, 1942.

ABSOPURE

The applicant is the owner of registration No. 307,318, dated Oct. 24, 1933.

FOR CANNED CITRUS FRUIT JUICES.

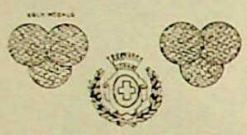
Claims use since Apr. 19, 1933.

CLASS 47

WINES

Ser. No. 453,546. ITALIAN SWISS COLONY, San Francisco, Calif. Filed June 8, 1942.

GOLD MEDAL LABEL



ITALIAN SWISS COLONY

Applicant is the owner of Reg. No. 373,734 and Reg. No. 398,146, both of which are under the 10-year proviso of the act of Feb. 20, 1905. The drawing is lined for gold. No claim is made to the word "Label" apart from the mark.

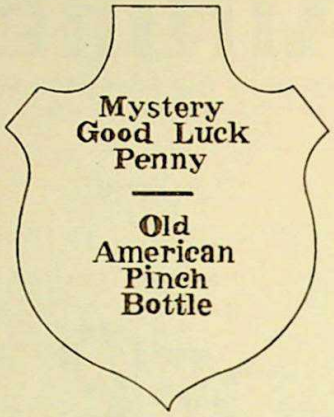
FOR WINES.

Claims use since Apr. 29, 1939.

CLASS 50

MERCHANDISE NOT OTHERWISE CLASSIFIED

Ser. No. 454,660. BERNARD LUBOW, New York, N. Y. Filed Aug. 1, 1942.



No claim is made to the words "Penny" and "Old American Pinch Bottle" apart from the mark.

FOR GLASS BOTTLE NOVELTIES DISPLAYING A COIN THEREIN USED AS TALISMANS.

Claims use since Apr. 9, 1942.

Ser. No. 456,401. GEO. H. MAUS, INC., Amsterdam, N. Y. Filed Oct. 24, 1942.

GOLD MEDAL

FOR BAMBOO RUG POLES.

Claims use since July 22, 1910.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

FEBRUARY 9, 1943

399,928. IRONING TABLES. THE J. R. CLARK CO., Minneapolis, Minn.
Filed January 9, 1941. Serial No. 439,512. PUBLISHED SEPTEMBER 23, 1941. Class 24.

399,929. PROTECTIVE WEARING APPAREL FOR MINERS, INDUSTRIAL WORKERS, FIREFIGHTERS, AND THOSE ENGAGED IN HAZARDOUS PURSUITS, ETC. MINE SAFETY APPLIANCES COMPANY, Pittsburgh, Pa.
Filed March 22, 1941. Serial No. 441,831. PUBLISHED NOVEMBER 24, 1942. Class 39.

399,930. NONALCOHOLIC MALTLESS BEVERAGE SOLD AS A SOFT DRINK AND CONCENTRATE FOR MAKING THE SAME. R. J. REYNOLDS, JR., Atlanta, Ga., assignor to Hep, Inc., Atlanta, Ga., a corporation of Georgia.
Filed April 16, 1941. Serial No. 442,638. PUBLISHED JULY 22, 1941. Class 45.

399,931. ANTISEPTIC VAGINAL JELLY. E. C. HARDEN, doing business as Bora-Quin Chemical Company, Little Rock, Ark.
Filed May 27, 1941. Serial No. 443,980. PUBLISHED SEPTEMBER 16, 1941. Class 6.

399,932. WOVEN TEXTILE FABRIC IN THE PIECE PROCESSED TO MAKE IT WATER REPELLENT AND FREE FROM SURFACE COARSENESS AND ADAPTED FOR COVERING THE WINGS AND FUSELAGE OF AIRPLANES. COLUMBUS COATED FABRICS CORPORATION, Columbus, Ohio.
Filed July 19, 1941. Serial No. 445,486. PUBLISHED DECEMBER 1, 1942. Class 50.

399,933. LIQUID MAKEUP FOR THE BODY, PARTICULARLY THE LIMBS. MINER'S, INC., New York, N. Y.
Filed August 13, 1941. Serial No. 446,210. PUBLISHED MAY 26, 1942. Class 6.

399,934. VEGETABLE SALAD AND COOKING OILS. GEORGE SIROTA & COMPANY, INC., New York, N. Y.
Filed August 29, 1941. Serial No. 446,670. PUBLISHED NOVEMBER 24, 1942. Class 46.

399,935. RADIO RECEIVING APPARATUS; COMBINATION RADIO RECEIVING AND ELECTRIC PHONOGRAPH APPARATUS WITH AND WITHOUT RECORD CHANGING MECHANISM, ETC. GALVIN MANUFACTURING CORPORATION, Chicago, Ill.
Filed September 13, 1941. Serial No. 447,018. PUBLISHED DECEMBER 1, 1942. Class 21.

399,936. COAL. CARTER COAL COMPANY, New York, N. Y.
Filed September 29, 1941. Serial No. 447,388. PUBLISHED DECEMBER 1, 1942. Class 1.

399,937. HONEY. H. H. SCHUMACHER, doing business as B-Z-B Honey Company and also as Bee Line Honey Co., Alhambra, Calif.
Filed October 6, 1941. Serial No. 447,577. PUBLISHED APRIL 21, 1942. Class 46.

399,938. HEADACHE POWDERS. RUPERT COX, doing business as Speed-Eez Company, Raleigh, N. C.
Filed October 9, 1941. Serial No. 447,631. PUBLISHED MARCH 17, 1942. Class 6.

399,939. VITAMIN PREPARATIONS FOR INTERNAL USE FOR THE TREATMENT OF VITAMIN DEFICIENCY. VALENTINE LABORATORIES, INC., Chicago, Ill.
Filed November 1, 1941. Serial No. 448,348. PUBLISHED JANUARY 6, 1942. Class 6.

399,940. ELECTRIC TESTING EQUIPMENT—NAMELY, ELECTRONIC TUBE TESTERS, ELECTRONIC METERS, ETC. CLOUGH BRENGLE CO., Chicago, Ill.
Filed November 17, 1941. Serial No. 448,692. PUBLISHED DECEMBER 1, 1942. Class 26.

399,941. COMPOUND OR PREPARATION FOR CURING PRESERVED MEATS, SUCH AS CORNED BEEF, PORK AND HAM OR THE LIKE. H. J. MAYER AND SONS COMPANY, Chicago, Ill.
Filed December 31, 1941. Serial No. 449,911. PUBLISHED FEBRUARY 24, 1942. Class 6.

399,942. COTTON PIECE GOODS. AMERICAN BLEACHED GOODS COMPANY, INC., New York, N. Y.
Filed January 12, 1942. Serial No. 450,152. PUBLISHED DECEMBER 1, 1942. Class 42.

399,943. PERFUMES. VICTOR VIVAUDOU, Tenafly, N. J.
Filed January 13, 1942. Serial No. 450,189. PUBLISHED NOVEMBER 17, 1942. Class 6.

399,944. LUMINOUS, FLUORESCENT, PHOSPHORESCENT AND RADIUM-ACTIVE PIGMENTS. RHODE ISLAND LABORATORIES, INC., West Warwick, R. I.
Filed January 24, 1942. Serial No. 450,459. PUBLISHED SEPTEMBER 1, 1942. Class 16.

399,945. ELECTRIC CONTACTING ELEMENTS—NAMELY, ELECTRIC CONTACTS AND CONTACT MAKING ELECTRODES INCLUDING SPOT WELDING ELECTRODES, RESISTANCE WELDING ELECTRODES, AND ELECTRIC UPSETTING DIES. P. R. MALLORY & CO., INC., Indianapolis, Ind.
Filed January 27, 1942. Serial No. 450,510. PUBLISHED DECEMBER 1, 1942. Class 21.

399,946. RELISH COCKTAIL SPREAD CONSISTING OF CREAM, SWEET RELISH, DEFATTED MILK SOLIDS, SALT, VEGETABLE GUM, AND U. S. CERTIFIED FOOD COLOR, ETC. THE BORDEN COMPANY, New York, N. Y.
Filed February 4, 1942. Under section 5b of the act of 1905, as amended in 1920. Serial No. 450,707. PUBLISHED DECEMBER 1, 1942. Class 46.

399,947. FEEDS FOR LIVE POULTRY. ALLIED MILLS, INC., Chicago, Ill.
Filed February 12, 1942. Serial No. 450,913. PUBLISHED NOVEMBER 17, 1942. Class 46.

399,948. FRUIT AND VEGETABLE EXTRACTS AND JUICES IN CONDENSED FORM, FOR FOOD PURPOSES. BRUCE'S JUICES, INC., Tampa, Fla.
Filed March 13, 1942. Serial No. 451,588. PUBLISHED JUNE 2, 1942. Class 46.

399,949. INFANTS' AND CHILDREN'S WEARING APPAREL—NAMELY, LAYETTE SETS, INFANTS' BELLY BANDS, CHRISTENING SUITS, DIAPERS, ETC. A. S. LAZARUS & CO., INC., New York, N. Y.
Filed March 14, 1942. Serial No. 451,627. PUBLISHED DECEMBER 1, 1942. Class 39.

399,950. ACOUSTICAL LIME AND ACOUSTICAL PLASTER. THE KELLEY ISLAND LIME AND TRANSPORT COMPANY, Cleveland, Ohio.
Filed March 17, 1942. Serial No. 451,680. PUBLISHED DECEMBER 1, 1942. Class 12.

399,951. VITAMIN FORTIFIER, A COMPOUND OR PREPARATION USED TO FORTIFY FOODS DEFICIENT IN VITAMINS. GEO. P. BRAUN COMPANY, Chicago, Ill.
Filed March 18, 1942. Serial No. 451,708. PUBLISHED APRIL 28, 1942. Class 6.

399,952. WOMEN'S HATS. LAYCOB HAT COMPANY, St. Louis, Mo.
Filed March 20, 1942. Serial No. 451,770. PUBLISHED NOVEMBER 24, 1942. Class 39.

399,953. NON-CEREAL FOOD PRODUCT PREPARED FROM TARO ROOT, ETC. GALEN COMPANY, Berkeley, Calif.
Filed April 1, 1942. Serial No. 452,071. PUBLISHED DECEMBER 1, 1942. Class 46.

399,954. PAINT BRUSHES INCLUDING THOSE WITH QUILL HANDLES. DELTA BRUSH MFG. CORP., New York, N. Y.
Filed April 21, 1942. Serial No. 452,466. PUBLISHED DECEMBER 1, 1942. Class 29.

399,955. LADIES' HATS. WALTER M. HAYFLICH, New York, N. Y.
Filed May 4, 1942. Serial No. 452,775. PUBLISHED DECEMBER 1, 1942. Class 39.

399,956. COIFFURE NEEDLE AND STRAND FOR USE IN SETTING HAIR. THE SEW-AND-SO COMPANY, Kansas City, Kans.
Filed May 4, 1942. Serial No. 452,789. PUBLISHED DECEMBER 1, 1942. Class 40.

399,957. WRITING PAPER. BRIGHTWATER PAPER COMPANY, Dover, Del., and Adams, Mass.
Filed May 20, 1942. Serial No. 453,137. PUBLISHED DECEMBER 1, 1942. Class 37.

399,958. PIECE GOODS OF SILK, RAYON, NYLON, COTTON AND MIXTURES THEREOF. HESS, GOLDSMITH & CO. INC., New York, N. Y.
Filed May 28, 1942. Serial No. 453,331. PUBLISHED NOVEMBER 24, 1942. Class 42.

399,959. ARTISTS' MATERIALS—NAMELY, WAX CRAYONS, PRESSED CRAYONS, SCHOOL AND ARTISTS' PASTELS, AND CHALK AND DUSTLESS CRAYONS. ART CRAYON CO., INC., Brooklyn, N. Y.
Filed May 29, 1942. Serial No. 453,355. PUBLISHED DECEMBER 1, 1942. Class 37.

399,960. VITAMIN TONIC. ROBERT J. BEARD, doing business as Tetley-Wessinger Company, Washington, D. C.
Filed June 5, 1942. Serial No. 453,484. PUBLISHED NOVEMBER 17, 1942. Class 6.

399,961. APPARATUS FOR TESTING, EXERCISING, AND TRAINING THE EYES. BAUSCH & LOMB OPTICAL COMPANY, Rochester, N. Y.
Filed June 11, 1942. Serial No. 453,591. PUBLISHED JULY 28, 1942. Class 26.

399,962. CIGARETTE PAPER. CHAMPAGNE PAPER CORPORATION, Pisgah Forest, N. C.
Filed June 19, 1942. Serial No. 453,747. PUBLISHED NOVEMBER 3, 1942. Class 8.

399,963. GENERATORS OF ELECTRIC SIGNALS IN RADIO, AUDIO, AND CARRIER FREQUENCIES; AND TRANSMISSION EQUIPMENT FOR TELEPHONE CIRCUITS. CLOUGH BRENGLE CO., Chicago, Ill.
Filed June 22, 1942. Serial No. 453,788. PUBLISHED DECEMBER 1, 1942. Class 21.

399,964. BITUMINIZED SHEET STEEL ROOFING, ROOF VALLEYS AND GUTTERS, AND SIDING. COATED PRODUCTS CORPORATION, Verona, Pa.
Filed June 23, 1942. Serial No. 453,824. PUBLISHED DECEMBER 1, 1942. Class 12.

399,965. INDICATING AND RECORDING THERMOMETERS AND VARIOUS TYPES OF THERMOMETERS FOR USE IN CONNECTION WITH CONTROLLERS FOR REGULATING TEMPERATURES FOR FLUIDS OF ALL TYPES. WALTER J. HALPERN, doing business as Gotham Instrument Company, New York, N. Y.
Filed June 29, 1942. Serial No. 453,940. PUBLISHED DECEMBER 1, 1942. Class 26.

399,966. STERLING SILVER JEWELRY, NOT INCLUDING WATCHES. HARRY S. BICK, doing business as Kramer & Bick, New York, N. Y.
Filed July 2, 1942. Serial No. 454,001. PUBLISHED DECEMBER 1, 1942. Class 28.

399,967. CANNED CITRUS JUICES FOR BEVERAGE PURPOSES. BORDER PACKING CORPORATION, Brownsville, Tex.
Filed July 13, 1942. Serial No. 454,184. PUBLISHED NOVEMBER 24, 1942. Class 45.

399,968. FUR COATS, FUR JACKETS, AND FUR MUFFS. MANNY PRUSKAUER, INC., Chicago, Ill.
Filed July 13, 1942. Serial No. 454,201. PUBLISHED DECEMBER 1, 1942. Class 39.

399,969. MEN'S HATS. BOYD-RICHARDSON COMPANY, St. Louis, Mo.
Filed July 25, 1942. Serial No. 454,500. PUBLISHED NOVEMBER 24, 1942. Class 39.

399,970. PLANOGRAPHIC PRINTING PLATES. ADDRESSOGRAPH-MULTIGRAPH CORPORATION, Cleveland, Ohio.
Filed July 29, 1942. Serial No. 454,566. PUBLISHED DECEMBER 1, 1942. Class 50.

399,971. FACE POWDER. LADY ESTHER, LTD., Chicago, Ill.
Filed July 31, 1942. Serial No. 454,636. PUBLISHED NOVEMBER 24, 1942. Class 6.

399,972. SUNGLASSES AND OPTICAL FRAMES. MARINE OPTICAL MFG. CO., Roslindale, Boston, Mass.
Filed July 31, 1942. Serial No. 454,639. PUBLISHED DECEMBER 1, 1942. Class 26.

399,973. HATS, HAT BODIES, HAT LININGS, HAT SWEATBANDS, AND HOODS FOR MEN, WOMEN, AND CHILDREN. STRAWS, INC., New York, N. Y.
Filed August 5, 1942. Serial No. 454,744. PUBLISHED DECEMBER 1, 1942. Class 39.

399,974. MEDICINAL PREPARATION FOR THE TREATMENT OF RHEUMATISM, SCIATICA, AND NEURITIS. THE NORITO CO., Chicago, Ill.
Filed August 6, 1942. Serial No. 454,761. PUBLISHED NOVEMBER 17, 1942. Class 6.

399,975. HATS FOR WOMEN AND MISSES. BERTLYN CORPORATION, New York, N. Y.
Filed August 11, 1942. Serial No. 454,846. PUBLISHED NOVEMBER 24, 1942. Class 39.

399,976. AUTOMOBILE SERVICE AND MAINTENANCE EQUIPMENT — NAMELY, PRINTED CHARTS, BLANK WORK SHEETS, PRINTED TICKETS AND CASE THEREFOR, ALL SOLD AS A UNIT. DARRELL M. JOHNSON, Thomson, Ga.
Filed August 11, 1942. Serial No. 454,851. PUBLISHED DECEMBER 1, 1942. Class 50.

399,977. LIQUID COMPOUND FOR APPLICATION TO IGNITION WIRES TO PROTECT THEM AND MAKE THEM WATERPROOF. RADIATOR SPECIALTY COMPANY, Charlotte, N. C.; Los Angeles, Calif.; and Toronto, Ontario, Canada.
Filed August 17, 1942. Serial No. 454,951. PUBLISHED DECEMBER 1, 1942. Class 21.

399,978. HORSE MEDICINE. THE NEWTON HORSE MEDICINE COMPANY, Detroit, Mich.
Filed August 19, 1942. Serial No. 454,988. PUBLISHED NOVEMBER 17, 1942. Class 6.

399,979. IRON ALLOY CASTINGS AND FERROUS METALS AND ALLOYS IN RAW AND PARTLY FINISHED CONDITION. THE ARCADE MALLEABLE IRON CO., Worcester, Mass.
Filed August 20, 1942. Serial No. 454,995. PUBLISHED NOVEMBER 24, 1942. Class 14.

399,980. COATED LAXATIVE PELLETS. WALGREN CO., Chicago, Ill.
Filed August 22, 1942. Serial No. 455,057. PUBLISHED OCTOBER 20, 1942. Class 6.

399,981. TOOL STEEL. THE CARPENTER STEEL COMPANY, Reading, Pa.
Filed August 25, 1942. Serial No. 455,096. PUBLISHED NOVEMBER 24, 1942. Class 14.

399,982. SENSITIZED PHOTOGRAPHIC FILM. JOSEPH N. DRIBBEN, La Crosse, Wis.
Filed August 26, 1942. Serial No. 455,116. PUBLISHED DECEMBER 1, 1942. Class 26.

399,983. ELECTRICAL PORCELAIN INSULATORS. PACIFIC CLAY PRODUCTS, Los Angeles, Calif.
Filed August 26, 1942. Serial No. 455,124. PUBLISHED DECEMBER 1, 1942. Class 21.

399,984. RAYON PIECE GOODS. STOCKTON TEXTILE CORPORATION, New York, N. Y., assignor to Irving Schwartz and Lilly Schwartz, doing business under the firm name of Stockton Textile Co., New York, N. Y.
Filed September 1, 1942. Serial No. 455,247. PUBLISHED DECEMBER 1, 1942. Class 42.

399,985. SHOES AND SLIPPERS MADE OF LEATHER, RUBBER, OR FABRIC, OR OF VARIOUS COMBINATIONS THEREOF. SALVADOR CUETARA, Boston, Mass.
Filed September 2, 1942. Serial No. 455,253. PUBLISHED NOVEMBER 24, 1942. Class 39.

399,986. COATED DUPLICATING SHEETS FOR USE IN DUPLICATING MACHINES. OLD TOWN RIBBON & CARBON CO., INC., Brooklyn, N. Y.
Filed September 5, 1942. Serial No. 455,379. PUBLISHED NOVEMBER 24, 1942. Class 11.

399,987. CIGARETTE PAPER. CHAMPAGNE PAPER CORPORATION, Pisgah Forest, N. C.
Filed September 9, 1942. Serial No. 455,425. PUBLISHED DECEMBER 1, 1942. Class 8.

399,988. PREPARATION FOR THE TREATMENT OF PELLAGRA. WILLIAM M. MOSELEY, Repton, Ala.
Filed September 15, 1942. Serial No. 455,538. PUBLISHED NOVEMBER 24, 1942. Class 6.

399,989. PIECE GOODS COMPOSED WHOLLY OR IN PART OF SILK, WOOL, HAIR, RAYON, COTTON, HEMP, FLAX, JUTE, ALPHA FIBER, ALOE FIBER, VEGETABLE FIBER, OR MIXTURES THEREOF. BIANCHINI FERIER, INC., New York, N. Y.
Filed September 17, 1942. Serial No. 455,583. PUBLISHED NOVEMBER 24, 1942. Class 42.

399,990. PIECE GOODS COMPOSED WHOLLY OR IN PART OF SILK, WOOL, HAIR, RAYON, COTTON, HEMP, FLAX, JUTE, ALPHA FIBER, ALOE FIBER, VEGETABLE FIBER, OR MIXTURES THEREOF. BIANCHINI FERIER, INC., New York, N. Y.
Filed September 17, 1942. Serial No. 455,585. PUBLISHED NOVEMBER 24, 1942. Class 42.

399,991. PERFUME, COLOGNE, AND TOILET WATER. PRINCE MATCHABELLI, INC., New York, N. Y.
Filed September 19, 1942. Serial No. 455,630. PUBLISHED NOVEMBER 17, 1942. Class 6.

399,992. READY MIXED PAINT. COOK PAINT & VARNISH COMPANY, North Kansas City, Mo.
Filed September 21, 1942. Serial No. 455,646. PUBLISHED DECEMBER 1, 1942. Class 16.

399,993. GERMICIDE FOR CONTROL OF PULP AND PAPER MILL SLIMES. THE HAMILTON LABORATORIES, INC., Hamilton, Ohio.
Filed September 21, 1942. Serial No. 455,654. PUBLISHED NOVEMBER 17, 1942. Class 6.

399,994. MEN'S HATS MADE OF CLOTH, FELT, OR STRAW. MEN'S HATS, INC., Baltimore, Md.
Filed September 21, 1942. Serial No. 455,660. PUBLISHED NOVEMBER 24, 1942. Class 39.

399,995. CARBONATED, NON-ALCOHOLIC, NON-CEREAL, MALTLESS BEVERAGES SOLD AS SOFT DRINKS. THE SEVEN-UP COMPANY, St. Louis, Mo.
Filed September 23, 1942. Under the act of February 20, 1905, as amended June 10, 1938. Serial No. 455,712. PUBLISHED NOVEMBER 24, 1942. Class 45.

399,996. PREPARATIONS FOR THE TREATMENT OF FOOT AILMENTS—NAMELY, LIQUID AND OINTMENT COMPOUNDS FOR TREATING ATHLETE'S FOOT, CORNS, CALLOUSES, PERSPIRING AND BURNING FEET, AND FOR ELIMINATING BAD FOOT ODORS. MINA FOSTER, doing business as Foster Laboratories, Lansing, Mich.
Filed September 24, 1942. Serial No. 455,726. PUBLISHED NOVEMBER 24, 1942. Class 6.

399,997. MEN'S HATS. GEORGE S. BAILEY HAT COMPANY, INC., Los Angeles, Calif.
Filed September 25, 1942. Serial No. 455,743. PUBLISHED NOVEMBER 24, 1942. Class 39.

399,998. BOOTS AND SHOES OF LEATHER, FABRIC, AND/OR COMBINATIONS THEREOF. INTERNATIONAL SHOE CO., St. Louis, Mo.
Filed September 25, 1942. Serial No. 455,757. PUBLISHED DECEMBER 1, 1942. Class 39.

399,999. FLUORESCENT OIL, OIL CONCENTRATES AND POWDERS FOR USE IN TESTING ARTICLES FOR FLAWS AND DEFECTS. MAGNAFLUX CORPORATION, Chicago, Ill.
Filed September 26, 1942. Serial No. 455,801. PUBLISHED NOVEMBER 24, 1942. Class 6.

400,000. GARMENT OR OTHER MATERIAL PRESSING ELECTRIC HAND IRONS. EDMILTON CORPORATION, Milwaukee, Wis.
Filed September 28, 1942. Serial No. 455,818. PUBLISHED DECEMBER 1, 1942. Class 21.

400,001. ACETYLENE REGULATING VALVES. THE LIQUID CARBONIC CORPORATION, Chicago, Ill.
Filed September 28, 1942. Serial No. 455,823. PUBLISHED DECEMBER 1, 1942. Class 13.

400,002. GAS WELDING, CUTTING, BRAZING, AND PREHEATING TORCHES. THE LIQUID CARBONIC CORPORATION, Chicago, Ill.
Filed September 28, 1942. Serial No. 455,824. PUBLISHED DECEMBER 1, 1942. Class 34.

400,003. GYPSUM BOARD. UNITED STATES GYPSUM COMPANY, Chicago, Ill.
Filed September 28, 1942. Serial No. 455,834. PUBLISHED DECEMBER 1, 1942. Class 12.

400,004. TOILET SOAP. CHANEL, INC., New York, N. Y.
Filed September 29, 1942. Serial No. 455,839. PUBLISHED DECEMBER 1, 1942. Class 4.

400,005. LIPSTICKS, CREAM ROUGE, COMPACT ROUGE, FACE POWDER, PERFUME, LUBRICATING CREAM, CLEANSING CREAM, FACE LOTION, NAIL ENAMEL, AND POWDER FOUNDATION PRODUCT. FRANCES DENNEY, Philadelphia, Pa.
Filed October 1, 1942. Serial No. 455,885. PUBLISHED NOVEMBER 17, 1942. Class 6.

400,006. HOG RINGS. DECKER MANUFACTURING COMPANY, Keokuk, Iowa.
Filed October 2, 1942. Serial No. 455,910. PUBLISHED DECEMBER 1, 1942. Class 13.

400,007. MATTRESSES. NATIONAL MATTRESS COMPANY, Huntington, W. Va.
Filed October 7, 1942. Serial No. 456,025. PUBLISHED DECEMBER 1, 1942. Class 32.

400,008. COATED ABRASIVES. BEHR-MANNING CORPORATION, Troy, N. Y.
Filed October 12, 1942. Serial No. 456,137. PUBLISHED DECEMBER 1, 1942. Class 4.

400,009. FRESH FRUITS—NAMELY, NECTARINES, GRAPES, AND PEARS. HOLMES BROTHERS, also doing business as Bear Creek Orchards, Medford, Oreg.
Filed October 14, 1942. Serial No. 456,183. PUBLISHED DECEMBER 1, 1942. Class 46.

400,010. CANNED VEGETABLES, CANNED FRUITS, AND CANNED FRUIT JUICES—NAMELY, TOMATOES, SHOESTRING BEETS, ETC. NATIONAL RETAILER-OWNED GROCERS, INC., Chicago, Ill.
Filed October 14, 1942. Serial No. 456,194. PUBLISHED DECEMBER 1, 1942. Class 46.

400,011. CANNED FISH. SEA PRIDE PACKING CORPORATION, LTD., San Francisco, Calif.
Filed October 19, 1942. Serial No. 456,276. PUBLISHED DECEMBER 1, 1942. Class 46.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION

400,012. (CLASS 39. CLOTHING.) STROM, COLLUM & HOPPE, San Francisco, Calif. Filed Mar. 23, 1940. Serial No. 429,918.

Brockway

FOR MEN'S AND BOYS' KNITTED AND TEXTILE PRODUCTS—NAMELY, HOSIERY, SPORT AND CONVENTIONAL SWEATERS, JACKETS AND OUTER SHIRTS, AND UNDERWEAR.
Claims use since Feb. 2, 1940.

400,013. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) EDWIN N. SCULLY, Chicago, Ill. Filed Mar. 28, 1940. Serial No. 430,098.

TRACE-O-FILM
"8th WONDER of the GRAPHIC WORLD"

FOR CELLULOSE ACETATE FILM, COATED (MATTE FINISH).
Claims use since July 1, 1939.

400,014. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS.) NIAGARA BLOWER COMPANY, Buffalo and New York, N. Y. Filed Mar. 29, 1941. Serial No. 442,071.

NIAGARA

FOR LIQUID COOLERS OR HEAT EXCHANGERS FOR COOLING AND CONTROLLING THE TEMPERATURE OF DIESEL OR GAS ENGINE JACKET WATER, WELDING MACHINES, INDUSTRIAL LIQUIDS, LUBRICATING OILS, ROLLING MILLS, WIRE DRAWING MILLS, AUTOMATIC MACHINES, AIR CONDITIONING APPARATUS, WATER QUENCHING BATHS, HYDRAULIC FLUIDS, OIL QUENCHING BATHS, TRANSFORMER OILS, INDUSTRIAL COOLANTS, CONTROLLING THE VISCOSITY OF INGREDIENTS IN PAINTS AND LACQUERS, AND EDIBLE VEGETABLE AND MINERAL OILS, CONDENSING VAPOR GAS IN OIL AND CHEMICAL PLANTS, AND ALSO FOR CONTROLLING TEMPERATURES OF BROACHING AND GRINDING OILS, COOLING WATERS FOR CONDENSING OR LIQUEFYING PROCESS LIQUORS, CHEMICALS, INTERMEDIATES, AND OIL DERIVATIVES.
Claims use since October, 1939.

400,015. (CLASS 39. CLOTHING.) FRIEDMAN-MARKS CLOTHING COMPANY, INC., Richmond, Va. Filed Aug. 4, 1941. Serial No. 445,928.

Angus McCabe

The picture is fanciful.
FOR MEN'S SUITS AND COATS.
Claims use since August, 1939.

400,016. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THEODORE NICOLET, doing business as Old Quebec Soup Co., Rutland, Vt. Filed Oct. 16, 1941. Serial No. 447,848.

Old Quebec

FOR FRENCH CANADIAN STYLE PEA SOUP.
Claims use since Apr. 1, 1941.

400,017. (CLASS 39. CLOTHING.) AUGUST BENTKAMP, New York, N. Y. Filed Oct. 28, 1941. Serial No. 448,182.

POCK-IT

FOR EAR MUFFS.
Claims use since Oct. 24, 1941.

400,018. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) SOUZA BROS. PACKING CO., Santa Maria, Calif. Filed Dec. 8, 1941. Serial No. 449,301.

SOUZA

FOR FRESH VEGETABLES.
Claims use since Nov. 27, 1941.

400,019. (CLASS 39. CLOTHING.) LEEA M. PERLITCH, New York, N. Y. Filed Dec. 10, 1941. Serial No. 449,353.

Lee's DICKEESLIP Ease

FOR COMBINED BLOUSE AND SLIP, AND ENSEMBLE DRESSES.
Claims use since Nov. 22, 1941.

400,020. (CLASS 39. CLOTHING.) KAY FERER, INC., St. Louis, Mo. Filed Dec. 12, 1941. Serial No. 449,412.

Kay Collier

FOR LADIES' AND JUNIOR'S STREET, EVENING, HOUSE, AND SPORT DRESSES, SKIRTS, BLOUSES, JACKETS, AND SUITS.
Claims use since Nov. 15, 1941.

400,021. (CLASS 39. CLOTHING.) KAY FERER, INC., St. Louis, Mo. Filed Dec. 12, 1941. Serial No. 449,413.

Kay Ferer

FOR LADIES' AND JUNIOR'S STREET, EVENING, HOUSE, AND SPORT DRESSES, SKIRTS, BLOUSES, JACKETS, AND SUITS.
Claims use since Nov. 15, 1941.

400,022. (CLASS 39. CLOTHING.) LEEA M. PERLITCH, New York, N. Y. Filed Dec. 12, 1941. Serial No. 449,432.

HOLSET Ensemble

FOR COMBINED BLOUSE AND SLIP, AND ENSEMBLE DRESSES FOR WOMEN, MISSES, AND GIRLS.
Claims use since Nov. 22, 1941.

400,023. (CLASS 39. CLOTHING.) HART, SCHAFFNER & MARX, Chicago, Ill. Filed Dec. 15, 1941. Serial No. 449,487.

XTRA-KOOL

FOR MEN'S AND BOYS' SUITS, COATS, OVERCOATS, TOPCOATS, VESTS, TROUSERS, KNICKERBOCKERS, AND BREECHES.
Claims use since Dec. 1, 1941.

400,024. (CLASS 39. CLOTHING.) JULIUS KAYSER & Co., New York, N. Y. Filed Jan. 8, 1942. Serial No. 450,071.

"Finger-fit"

FOR LADIES' FABRIC GLOVES.
Claims use since Dec. 11, 1941.

400,025. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ASSOCIATED LABORATORIES, INC., doing business as Vitamin-Quota, Long Island City, N. Y. Filed Feb. 5, 1942. Serial No. 450,758.

MINERAL-QUOTA

FOR MINERAL PRODUCTS—NAMELY, TABLETS CONTAINING MINERAL CONCENTRATES.
Claims use since Dec. 1, 1941.

400,026. (CLASS 39. CLOTHING.) SAKS & COMPANY, New York, N. Y. Filed Feb. 10, 1942. Serial No. 450,882.

SAKSuede

FOR MISSES' AND WOMEN'S GLOVES MADE OF LEATHER WITH A SUEDE FINISH.
Claims use since Dec. 1, 1941.

400,027. (CLASS 39. CLOTHING.) DAVID CRYSTAL, INC., New York, N. Y. Filed Feb. 25, 1942. Serial No. 451,199.

COPACABANA

FOR LADIES' AND MISSES' DRESSES AND DRESS ENSEMBLES CONSISTING OF DRESS AND COAT.
Claims use since Nov. 7, 1941.

400,028. (CLASS 39. CLOTHING.) ELY & WALKER DRY GOODS COMPANY, St. Louis, Mo. Filed Mar. 16, 1942. Serial No. 451,641.

jackie hill Juniors

FOR MISSES' AND JUNIORS' DRESSES.
Claims use since Dec. 8, 1941.

400,029. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) MILTON FINK, New York, N. Y. Filed May 14, 1942. Serial No. 453,007.

GARFIELD

FOR DIATHERMY MACHINES FOR THERAPEUTIC USES.
Claims use since July 19, 1939.

400,030. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) IDAHO POTATO STARCH CO., Blackfoot, Idaho. Filed June 26, 1942. Serial No. 453,893.

FOR POTATO STARCH FOR INDUSTRIAL PURPOSES.
Claims use since Oct. 15, 1941.

400,031. (CLASS 39. CLOTHING.) CINCINNATI TAILORING CO., also doing business as "Schaefer Tailoring Company," Cincinnati, Ohio. Filed Sept. 15, 1942. Serial No. 455,527.

FOR MEN'S CLOTHING, COMPRISING COATS, VESTS, TROUSERS, OVERCOATS, AND TOPCOATS.
Claims use since 1923.

400,032. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) SYNTHETIC PLASTICS CORP., New York, N. Y. Filed Oct. 14, 1942. Serial No. 456,208.

PLASTIGRIP

FOR PLASTIC BUCKLES AND GARMENT CLASP SUPPORTER HOOKS.
Claims use since Dec. 8, 1941.

400,033. (CLASS 39. CLOTHING.) JOSEPH GUTTMAN & BROS., New York, N. Y. Filed Nov. 16, 1942. Serial No. 456,849.

FOR LADIES' AND MISSES' KNITTED DRESSES, BLOUSES, SKIRTS, JACKETS, AND SWEATERS.
Claims use since May 27, 1941.

400,034. (CLASS 39. CLOTHING.) BOBSHIRE COATS, INC., New York, N. Y. Filed Nov. 23, 1942. Serial No. 456,968.

LANCASHIRE

FOR WOMEN'S AND MISSES' COATS, SUITS, COAT AND SUIT ENSEMBLES, JACKETS, AND SKIRTS.
Claims use since Sept. 2, 1941.

400,035. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) THE LUFKIN RULE COMPANY, Saginaw, Mich. Filed Nov. 28, 1942. Serial No. 457,101.

CHROME CLAD

FOR TAPE MEASURES.
Claims use since Apr. 21, 1941.

TRADE-MARK REGISTRATIONS RENEWED

22,394. **NAVALITE.** VARNISHES, STAINS, DRIERS, JAPANS, AND KINDRED GOODS. Registered January 31, 1893. CHICAGO VARNISH COMPANY, Chicago, Ill. Re-renewed January 31, 1943, to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware, assignee by mesne assignments.

23,017. **FOWNES'.** GLOVES. Registered May 16, 1893. FOWNES BROTHERS & CO., London, England. Re-renewed May 16, 1943, to Fownes Brothers & Co. Incorporated, Gloversville, Amsterdam, and New York, N. Y., a corporation of New York, assignee.

158,262. **ROAMER.** WATCHES, CLOCKS, AND PARTS THEREOF. Registered August 29, 1922. MEYER & STÜDELI SOCIÉTÉ ANONYME, Soleure, Switzerland, a corporation of Switzerland. Renewed August 29, 1942.

162,312. **"MERRIMAC" AND DRAWING.** STORAGE BATTERIES. Registered December 12, 1922. MERRIMAC BATTERY PLATE CO. INC., Louisville, Ky., a corporation of Kentucky. Renewed December 12, 1942.

162,668. **REPRESENTATION OF A CIRCLE AND DIAMETER.** OPTICAL GOODS, AND PARTICULARLY SPECTACLES, EYEGLASSES, AND OTHER OPHTHALMIC MOUNTINGS AND PARTS THEREOF. Registered December 26, 1922. THE AMERICAN OPTICAL COMPANY, Southbridge, Mass., a voluntary association of Massachusetts. Renewed December 26, 1942.

162,708. **"COOK'S" AND DRAWING.** CANNED MEATS, CANNED VEGETABLES, AND CANNED COMBINATIONS OF MEATS AND VEGETABLES. Registered December 26, 1922. JOHN COOK & SONS, INC., Chicago, Ill. Renewed December 26, 1942, to The Tupman Thurlow Co., Inc., New York, N. Y., a corporation of New York, assignee.

162,719. **DAYLIGHT.** CERTAIN NAMED EYE, EAR, NOSE, AND THROAT DIAGNOSTIC INSTRUMENTS. Registered December 26, 1922. HENRY L. DE ZENG, trading as De Zeng-Standard Co., Camden, N. J. Renewed December 26, 1942, to American Optical Company, Southbridge Mass., a voluntary association of Massachusetts, assignee by mesne assignments.

163,017. **SEALBAC.** WATERPROOF ROOFING SHEETS, AND SHINGLES. Registered January 2, 1923. THE BARBER ASPHALT PAVING COMPANY, Philadelphia, Pa. Renewed January 2, 1943, to Barber Asphalt Corporation, Barber, N. J., a corporation of New Jersey, assignee.

163,057. **DU PONT NAPHTHANIL.** INTERMEDIATE FOR DYEING PROCESSES. Registered January 2, 1923. E. I. DU PONT DE NEMOURS AND COMPANY, Wilmington, Del., a corporation of Delaware. Renewed January 2, 1943.

163,078. **"SANDOW" AND DRAWING.** CORDAGE—NAMELY, SASH CORD. Registered January 2, 1923. THE M. J. GRADY COMPANY, INCORPORATED. Renewed January 2, 1943, to The Grady-Travers Company, Incorporated, New York, N. Y., a corporation of New York, assignee.

163,090. **ENTERPRISE.** LUBRICATING OILS AND GREASES. Registered January 2, 1923. FRANK B. HOWER, doing business as Enterprise Oil Co. Renewed January 2, 1943, to Enterprise Oil Company, Inc., Buffalo, N. Y., a corporation of New York, assignee.

163,360. **LANCHESTER.** AUTOMOBILES, MOTOR TRUCKS, AND MOTOR CYCLES. Registered January 9, 1923. THE LANCHESTER MOTOR CO. LTD., Birmingham, England. Renewed January 9, 1943, to The Lanchester Motor Company Limited, Coventry, England, an organized company of Great Britain.

163,466. **ARGENTONE.** WRITING PAPER, MAILING ENVELOPES, FLAT PAPER FOR PRINTERS' USE, PAPER BOARDS FOR CORRESPONDENCE, CHRISTMAS AND MENU CARDS, AND OTHER PURPOSES. Registered January 16, 1923. Z. AND W. M. CRANE. Renewed January 16, 1943, to Z. & W. M. Crane, Inc., Dalton, Mass., a corporation of Massachusetts, assignee.

163,486. **WEBLEY.** REVOLVERS, AUTOMATIC PISTOLS, AND OTHER SMALL ARMS. Registered January 16, 1923. WEBLEY & SCOTT LIMITED, Birmingham, England, a corporation of Great Britain. Renewed January 16, 1943.

163,955. **GLO.** STEEL WOOL IN THE FORM OF BLOCKS OR PADS FOR CLEANING PURPOSES, ALSO SOAP. Registered February 6, 1923. JAMES H. RHODES & COMPANY, Chicago, Ill., a corporation of Illinois. Renewed February 6, 1943.

163,973. **PACE MAKER.** OVERALLS, WORK SHIRTS, AND ROMPERS. Registered February 6, 1923. STUART, KEITH & CO. INC. Renewed February 6, 1943, to The Stuart-Keith Manufacturing Company, Baltimore, Md., a corporation of Maryland, successor.

164,311. **"K" AND DRAWING.** GRADUATED CHEMICAL AND LABORATORY GLASSWARE. Registered February 20, 1923. KIMBLE GLASS COMPANY, Chicago, Ill., and Vineland, N. J. Renewed February 20, 1943, to Kimble Glass Company, Vineland, N. J., a corporation of Illinois.

164,347. **DUSTITE.** RESPIRATORS AND INHALERS. Registered February 20, 1923. WILLSON GOGLES, INC. Renewed February 20, 1943, to Willson Products, Inc., Reading, Pa., a corporation of Pennsylvania, by change of name.

164,509. **TOCHSEDO.** VARNISHES AND PAINT ENAMELS. Registered February 20, 1923. TOCH BROTHERS, New York, N. Y., assignors to Toch Brothers, Incorporated. Renewed February 20, 1943, to Toch Brothers, Incorporated, Staten Island, N. Y., a corporation of New York, assignee.

164,992. **TURBINAIR.** MINING MACHINES, HOISTING MECHANISM, GRINDERS, AND ROTARY ENGINES. Registered February 27, 1923. SULLIVAN MACHINERY COMPANY, Boston, Mass., and Chicago, Ill. Renewed February 27, 1943, to Sullivan Machinery Company, Boston, Mass., and Michigan City, Ind., a corporation of Massachusetts.

165,083. **MAJESTIC.** HEATING APPARATUS. Registered March 6, 1923. MAJESTIC MANUFACTURING COMPANY, St. Louis, Mo., a corporation of Missouri. Renewed March 6, 1943.

165,555. **"W" AND DRAWING.** PRESSED GLASSWARE. Registered March 13, 1923. WESTMORELAND SPECIALTY COMPANY, Grapeville, Pa., a corporation of Pennsylvania. Renewed March 13, 1943.

165,568. **DADDY.** TOILET SOAP. Registered March 13, 1923. THE ANDREW JERGENS COMPANY, Cincinnati, Ohio, a corporation of Ohio. Renewed March 13, 1943.

165,996. **"RECKITT'S" AND DRAWING.** LAUNDRY BLUE. Registered May 27, 1923. RECKITTS (U. S. A.), LTD., New York, N. Y., and New Brunswick, N. J. Renewed May 27, 1943, to The R. T. French Company, Rochester, N. Y., a corporation of Delaware, assignee by mesne assignments.

166,103. **BLUE LABEL.** MALT EXTRACT FOR FOOD PURPOSES. Registered March 27, 1923. ANDREW F. STOY, doing business as Quaker City Home Beverage Co., Philadelphia, Pa. Renewed March 27, 1943, to Pabst Brewing Company, Peoria Heights, Ill., a corporation of Delaware, assignee.

166,862. **HARRY BERGER FEATHERWEIGHT.** MEN'S AND BOYS' SHIRTS, INCLUDING DRESS, NEGLIGEE, AND WORK SHIRTS. Registered April 17, 1923. HARRY BERGER, doing business as Harry Berger Shirt Company. Renewed April 17, 1943, to Kaylon Incorporated, New York, N. Y., a corporation of New York, successor.

166,915. **REPRESENTATION OF A SPINNING WHEEL.** CERTAIN NAMED KNITTED, NETTED, AND TEXTILE FABRICS. Registered April 17, 1923. JAMES MCCUTCHEON & COMPANY, New York, N. Y., a corporaof New York. Renewed April 17, 1943.

166,924. **REPRESENTATION OF A BEAR AND BALES OF GOODS.** THROWN SILK. Registered April 17, 1923. THE BAER COMPANY, Lehighton, Pa., a corporaof Pennsylvania. Renewed April 17, 1943.

166,931. **"NIBROC" AND DRAWING.** WRAPPING PAPER. Registered April 17, 1923. BROWN COMPANY, Portland, Maine. Renewed April 17, 1943, to Brown Company, Berlin, N. H., a corporation of Maine.

166,932. **"NIBROC" AND DRAWING.** WRAPPING PAPER. Registered April 17, 1923. BROWN COMPANY, Portland, Maine. Renewed April 17, 1943, to Brown Company, Berlin, N. H., a corporation of Maine.

167,048. **BLUE RIBBON.** NONALCOHOLIC, MALTLESS, FRUIT-FLAVORED CONCENTRATE FOR BEVERAGE PURPOSES. Registered April 24, 1923. PREMIER MALT PRODUCTS CO. OF OHIO, INC., Chicago, Ill., and Steubenville, Ohio. Renewed April 24, 1943, to Pabst Brewing Company, Peoria, Ill., a corporation of Delaware, assignee.

167,187. **SERVICESEAL.** A RAPID-DRYING VARNISH-BINDER AND A RAPID-DRYING VARNISH. Registered April 24, 1923. JOHN A. STEEN VARNISH COMPANY, Chicago, Ill., a corporation of Illinois. Renewed April 24, 1943.

167,387. **BRAN FLUFFS.** PREPARED AND SEMI-PREPARED BREAKFAST CEREALS. Registered May 1, 1923. AUNT JEMIMA MILLS COMPANY, St. Joseph, Mo. Renewed May 1, 1943, to The Quaker Oats Company, Chicago, Ill., a corporation of New Jersey, assignee.

167,394. **"RED TOP" AND DRAWING.** WHEAT FLOUR. Registered May 1, 1923. AUNT JEMIMA MILLS COMPANY, St. Joseph, Mo. Renewed May 1, 1943, to The Quaker Oats Company, Chicago, Ill., a corporation of New Jersey, assignee.

167,444. **"B".** FABRIC HOSE. Registered May 1, 1923. WILLIAM AND CHARLES BECK, INC., Lawrence, Mass., a corporation of Massachusetts. Renewed May 1, 1943.

167,615. **DORIS BLAKE.** NEWSPAPER ARTICLES. Registered May 1, 1923. The Tribune Company. Renewed May 1, 1943, to Tribune Company, Chicago, Ill., a corporation of Illinois.

167,671. **KOHLER.** ELECTRIC GENERATING PLANTS. Registered May 8, 1923. Kohler Co., Kohler, Wis., a corporation of Wisconsin. Renewed May 8, 1943.

167,767. **KOLEUM.** OILS FOR HEATING PURPOSES. Registered May 8, 1923. Union Petroleum Company, Philadelphia, Pa. Renewed May 8, 1943, to Sinclair Refining Company, New York, N. Y., a corporation of Maine, assignee.

167,770. **FLAX-MAID.** THREADS AND YARNS. Registered May 8, 1923. The M. J. Grady Company, Incorporated. Renewed May 8, 1943, to The Grady-Travers Company, Incorporated, New York, N. Y., a corporation of New York, assignee.

167,889. **WHITE LIGHTNING.** HORSE AND MULE FEED, COW FEED, CATTLE FEED, AND POULTRY FEED. Registered May 8, 1923. The Sturgess Company, Meridian, Miss., a corporation of Mississippi. Renewed May 8, 1943.

167,905. **BINDEX.** LEATHER FILLER. Registered May 8, 1923. The Champion Fibre Company, Canton, N. C. Renewed May 8, 1943, to The Champion Paper and Fibre Company, Hamilton, Ohio, a corporation of Ohio, assignee.

168,084. **KID-IN-ALL.** CHILDREN'S OVERALL PLAY SUITS. Registered May 15, 1923. The Maryland Company. Renewed May 15, 1943, to Casey Jones, Inc., Baltimore, Md., a corporation of Maryland, assignee.

168,149. **REPRESENTATION OF FOUR SQUARES.** CERTAIN NAMED TOOLS. Registered May 15, 1923. The Stanley Works, New Britain, Conn., a corporation of Connecticut. Renewed May 15, 1943.

168,224. **FLAX-MAID.** TWINE AND ROPE OR CORDAGE MADE FROM FLAX OR LINEN. Registered May 15, 1923. The M. J. Grady Company, Incorporated. Renewed May 15, 1943, to The Grady-Travers Company, Incorporated, New York, N. Y., a corporation of New York, assignee.

168,225. **FOUR SQUARE.** CERTAIN NAMED TOOLS. Registered May 15, 1923. The Stanley Works, New Britain, Conn., a corporation of Connecticut. Renewed May 15, 1943.

168,235. **ASEPTIFUME.** CHEMICAL PREPARATION FOR PURIFYING THE AIR AND FOR CLEANING AND DISINFECTING PURPOSES. Registered May 15, 1923. B. Heller & Company, Chicago, Ill., a corporation of Illinois. Renewed May 15, 1943.

168,330. **HUSKY.** MEN'S AND BOYS' OVERALLS AND COVERALLS. Registered May 22, 1923. Lindeke, Warner & Sons, Incorporated, St. Paul, Minn. Renewed May 22, 1943, to Ely & Walker Dry Goods Company, St. Louis, Mo., a corporation of Missouri, assignee by mesne assignments.

168,575. **"GOLD CREEK".** LEATHER. Registered May 29, 1923. Magnus Hessberg, Inc., Richmond, Va., a corporation of Virginia. Renewed May 29, 1943.

168,635. **GENASCO.** READY-MIXED PAINTS, MINERAL SPIRITS, AND PAINT OIL. Registered May 29, 1923. The Barber Asphalt Paving Company, Philadelphia, Pa. Renewed May 29, 1943, to Barber Asphalt Corporation, Barber, N. J., a corporation of New Jersey, assignee.

168,791. **BDA.** CERTAIN NAMED PIECE GOODS. Registered May 29, 1923. The Bradford Dyers' Association, Limited, Bradford, England, a corporation of the United Kingdom of Great Britain and Northern Ireland. Renewed May 29, 1943.

168,830. **ALOPHEN.** LAXATIVES AND CATHARTICS. Registered May 29, 1923. Parke, Davis & Company, Detroit, Mich., a corporation of Michigan. Renewed May 29, 1943.

168,844. **"CHIEF TWO MOON" AND DRAWING.** CERTAIN NAMED PHARMACEUTICAL PREPARATIONS. Registered May 29, 1923. The Chief Two Moon Herb Comapny. Renewed May 29, 1943, to Helen G. Meridas, Waterbury, Conn., assignee.

168,845. **"P-V" AND DRAWING.** PROPHYLACTIC OINTMENT. Registered May 29, 1923. William S. Hughes, doing business as The Pre Ven Shun Laboratories. Renewed May 29, 1943, to Bessie A. Childress, doing business as The Pre Ven Shun Laboratories, Kansas City, Mo., successor.

168,856. **THINWRAP.** KRAFT PAPER FOR WRAPPING PURPOSES. Registered May 29, 1923. The Dudley Paper Company, Lansing, Mich., a corporation of Michigan. Renewed May 29, 1943.

168,904. **HICKORY.** DRESS SHIELDS. Registered May 29, 1923. A. Stein & Company, Chicago, Ill., a corporation of Illinois. Renewed May 29, 1943.

168,943. **FOUR SQUARE.** CERTAIN NAMED HARDWARE. Registered May 29, 1923. The Stanley Works, New Britain, Conn., a corporation of Connecticut. Renewed May 29, 1943.

168,947. **REPRESENTATION OF FOUR SQUARES.** CERTAIN NAMED HARDWARE. Registered May 29, 1923. The Stanley Works, New Britain, Conn,. a corporation of Connecticut. Renewed May 29, 1943.

169,067. **REPRESENTATION OF FOUR SQUARES.** RULES, LEVELS, SQUARES, MARKING GAUGES, AND BEVELS. Registered June 5, 1923. The Stanley Works, New Britain, Conn., a corporation of Connecticut. Renewed June 5, 1943.

169,080. **FOUR SQUARE.** RULES, LEVELS, SQUARES, MARKING GAUGES, AND BEVELS. Registered June 5, 1923. The Stanley Works, New Britain, Conn., a corporation of Connecticut. Renewed June 5, 1943.

169,084. **OZITE.** FELT. Registered June 5, 1923. American Hair Felt Co. Renewed June 5, 1943, to American Hair & Felt Company, Chicago, Ill., a corporation of Delaware, assignee.

169,146. **KLEEN HEET.** HEAT-GENERATING PLANTS COMPRISING OIL TANKS, MOTORS, FANS, PUMPS, VALVES, BURNERS, MOTOR REGULATORS, THERMOSTATS, AND RELAYS. Registered June 12, 1923. Winslow Boiler & Engineering Co. Renewed June 12, 1943, to Kleen-Heet, Incorporated, Chicago, Ill., a corporation of Delaware, successor.

169,206. **HY-LIFT.** ELEVATING INDUSTRIAL TRUCKS AND STRUCTURAL PARTS THEREOF. Registered June 12, 1923. The Baker R & L Company. Renewed June 12, 1943, to The Baker-Raulang Company, Cleveland, Ohio, a corporation of Ohio, by change of name.

169,208. **HAUCK.** CERTAIN NAMED HEATING APPARATUS. Registered June 12, 1923. Hauck Manufacturing Company, Brooklyn, N. Y., a corporation of New York. Renewed June 12, 1943.

169,263. **GOLDEN GLOW.** FRESH GRAPES. Registered June 12, 1923. Associated Growers, Incorporated, Lodi, Calif., a corporation of California. Renewed June 12, 1943.

169,293. **SILKDOWN.** CERTAIN NAMED CLOTHING. Registered June 12, 1923. The Salt's Textile Manufacturing Company, Bridgeport, Conn., and New York, N. Y. Renewed June 12, 1943, to Beacon Manufacturing Company, Swannanoa, N. C., a corporation of Massachusetts, assignee by mesne assignments.

169,330. **ACCELLO.** A LIQUID FOR USE WITH CONCRETE AND CEMENT MIXTURES. Registered June 12, 1923. Anti-Hydro Waterproofing Company, Newark, N. J., a corporation of New Jersey. Renewed June 12, 1943.

169,332. **HAIRINSUL.** FELT INSULATING MATERIAL. Registered June 12, 1923. American Hair Felt Company. Renewed June 12, 1943, to American Hair & Felt Company, Chicago, Ill., a corporation of Delaware, assignee.

169,366. **NEVER FAIL.** TABLETS AND BOOK COVERS. Registered June 12, 1923. THE SMITH TABLET COMPANY, INC., Holyoke, Mass. Renewed June 12, 1943, to Western Tablet & Stationery Corporation, Dayton, Ohio, a corporation of Delaware, assignee.

169,435. **REPRESENTATION OF A CAT PARTLY IN A BAG.** BURLAP BAGS. Registered June 19, 1923. BEMIS BRO. BAG CO., St. Louis, Mo., a corporation of Missouri. Renewed June 19, 1943.

169,523. **REPRESENTATION OF A WOMAN'S HEAD.** SOAP. Registered June 19, 1923. THE N. RIESER COMPANY, INC., now by change of name, The Rieser Company, Inc. Renewed June 19, 1943, to The Rieser Company, New York, N. Y., a corporation of New York, by change of name.

169,525. **V.** SOAP. Registered June 19, 1923. THE N. RIESER COMPANY, INC., now by change of name, The Rieser Company, Inc. Renewed June 19, 1943, to The Rieser Company, New York, N. Y., a corporation of New York, by change of name.

169,597. **BLUE RIBBON.** A MALT EXTRACT IN SYRUP FORM. Registered June 26, 1923. DECATUR BREWING CO., Decatur, Ill. Renewed June 26, 1943, to Pabst Brewing Company, Peoria Heights, Ill., a corporation of Delaware, assignee.

169,602. **LIBERTY.** PIECE GOODS OF COTTON. Registered June 26, 1923. LIBERTY & CO. LIMITED, London, England, an incorporated company of The United Kingdom of Great Britain. Renewed June 26, 1943.

REISSUES

FEBRUARY 9, 1943

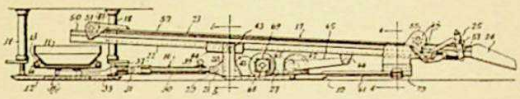
22,263

SHAKER CONVEYER

Loyal F. Crawford, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a corporation of Illinois

Original No. 2,265,519, dated December 9, 1941, Serial No. 330,477, April 19, 1940. Application for reissue October 22, 1942, Serial No. 463,007

14 Claims. (Cl. 198—220)



1. In a loading device for a shaker conveyer, a base adapted to be held from movement with respect to the ground during operation of the conveyer, a receiving hopper mounted on said base, an independently operable gathering unit adapted to pick up material from the ground and discharge it into said hopper, and a guiding connection between said base and gathering unit, for guiding said gathering unit for movement about said base to discharge material into said hopper in all positions of said gathering unit with respect to said base including a guiding and control link having connection with said gathering unit and mounted on said base beneath said hopper for pivotal movement about a vertical axis, said guiding and control link including a yoke pivotally mounted for movement about an axis extending longitudinally thereof and connecting members transversely pivoted to said yoke at one of their ends and to said gathering unit at their opposite ends, to permit said gathering unit to follow an uneven mine floor while being moved about said base.

22,264

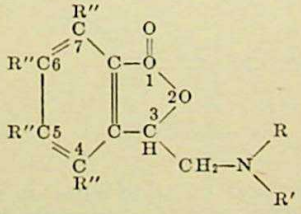
SECONDARY AND TERTIARY 3-AMINO-METHYL-POLYHYDROXY-PHTHALIDES

Walter Siegfried Loewe, New Rochelle, N. Y., assignor to Walter Neumann, Scarsdale, N. Y.

No Drawing. Original No. 2,268,990, dated January 6, 1942, Serial No. 291,304, August 22, 1939. Application for reissue June 8, 1942, Serial No. 446,258

4 Claims. (Cl. 260—344)

1. A substance represented by the formula:



and salts thereof where R is taken from the group consisting of H, alkyl and aryl radicals containing not more than 6 carbon atoms, R′ is taken from the group consisting of aryl and alkyl radicals having at least two carbon atoms, and not more than 6 and at least two and no more than three R″ are OH, the remaining R″ being H, said substance being prepared as a therapeutic agent.

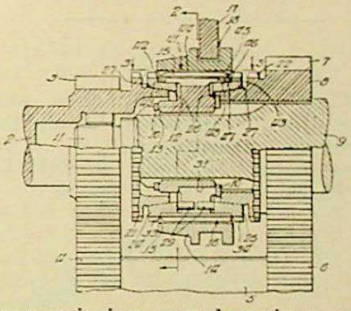
22,265

TRANSMISSION SYNCHRONIZER

Samuel O. White, Muncie, Ind., assignor to Borg-Warner Corporation, Chicago, Ill., a corporation of Illinois

Original No. 2,179,568, dated November 14, 1939, Serial No. 193,867, March 4, 1938, which is a division of Serial No. 160,844, August 25, 1937, now Patent No. 2,221,893, dated November 19, 1940. Application for reissue January 31, 1941, Serial No. 376,902

17 Claims. (Cl. 192—53)

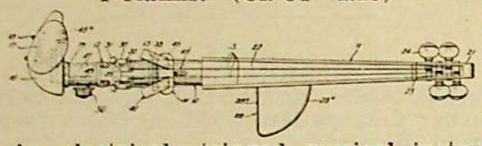


1. A transmission synchronizer comprising a pair of torque-transmitting members mounted in axial alignment, a movable jaw clutch element drivingly associated with one of said members and adapted to be moved into engagement with a jaw clutch element drivingly associated with the other member thus to establish a positive drive connection between said members, a synchronizer element having a lost motion drive connection with said one member and adapted to be moved into frictional driving engagement with said other member, and means including thrust members having relatively low inertia relative to said movable jaw clutch element, each operatively interposed between said synchronizer element and said movable clutch element for transmitting thrust from said movable clutch element to said synchronizer element in the direction of said other torque-transmitting member, thus to establish a frictional driving connection between said pair of torque members, said thrust members being formed of spring metal and each comprising a radially outwardly bowed central region in purely frictional engagement with the interior of the movable clutch element and a radially inwardly extending end portion engaging said synchronizer element, whereby to transmit to the latter, from said movable clutch element, sufficient thrust to initiate frictional driving engagement.

PATENTS

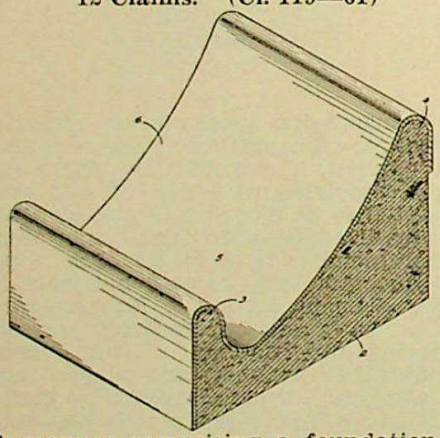
GRANTED FEBRUARY 9, 1943

2,310,199
STRINGED MUSICAL INSTRUMENT
George D. Beauchamp, Los Angeles, Calif.
Application October 14, 1940, Serial No. 361,019
4 Claims. (Cl. 84—1.15)



1. An electrical stringed musical instrument comprising an elongate body, tensioned strings stretched across the body, an electrical pick-up sensitive to vibration of the strings, and means supporting the pick-up on the body for adjustment longitudinally of the strings comprising a sleeve engaging around and shiftable along the body.

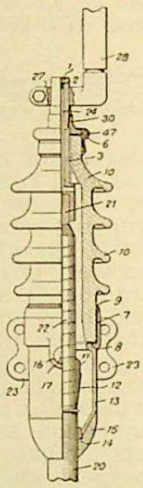
2,310,200
MANGER
Conral C. Callis, Smoketown, Pa., assignor to Armstrong Cork Company, Lancaster, Pa., a corporation of Pennsylvania
Application October 25, 1940, Serial No. 362,703
12 Claims. (Cl. 119—61)



1. A manger comprising a foundation and a preformed facing bonded thereto, said facing comprising a skeleton formed of interlaced entangled fibers saturated with a moisture resistant substance, the skeleton being held in fixed position in a thermoplastic matrix compatible with said moisture resistant substance.

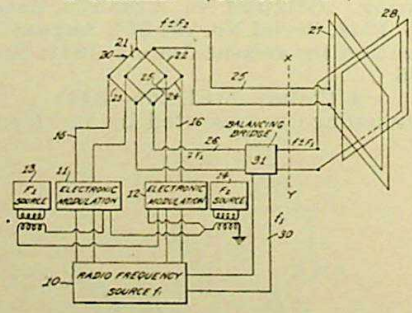
2,310,201
CABLE TERMINAL
Frederick G. Cox, Metuchen, N. J., assignor to General Cable Corporation, New York, N. Y., a corporation of New Jersey
Application September 23, 1939, Serial No. 296,209
10 Claims. (Cl. 174—75)

3. A cable terminal, comprising in combination, an insulator shell, a conductor stem passing through one end of the shell, locking pins on said stem fitting in recesses in said shell to prevent turning of the stem, an asbestos washer, a spacer washer, and a solder retaining packing washer around said stem on the end of the shell, a hoodnut provided with a base flange having a tapered bottom edge threaded on said stem and securing said washers against the end of said shell, a cap sleeve soldered to the tapered bottom edge of the hoodnut at its upper end, the packing washer fitting tightly within said cap sleeve to prevent the inflow of solder, packing between



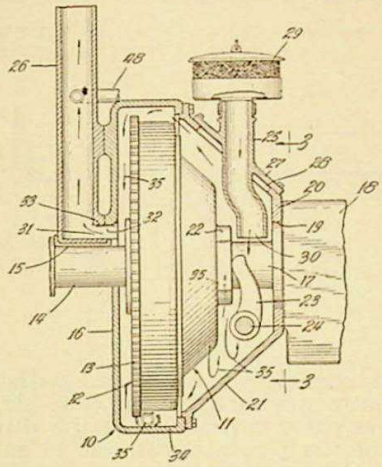
the shell and the sleeve, a solder joint between the lower edge of the sleeve and an integral metallized ring on said shell, the packing preventing the inflow of solder, said sleeve being corrugated between its ends to accommodate expansion and contraction.

2,310,202
ELECTRONIC BEACON MODULATOR
Andrew Alford, New York, N. Y., assignor to Federal Telephone & Radio Corporation, a corporation of Delaware
Application March 1, 1941, Serial No. 381,301
8 Claims. (Cl. 250—11)



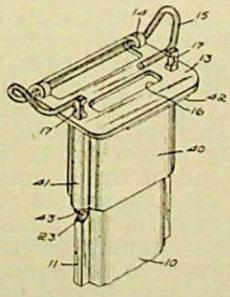
4. The method of producing a radio beacon which comprises, modulating radio frequency energy in phase at two points with a first distinctive signal, modulating said radio frequency energy at said two points in phase opposition with a second distinctive signal, combining said modulated carriers in phase to produce a resultant carrier modulated with said first distinctive signal only, combining said modulated carriers in phase opposition to produce a resultant carrier modulated with said second distinctive signal only, and radiating said resultant modulated carriers in overlapping relation.

2,310,203
AIR FILTER SYSTEM FOR MOTOR AND CLUTCH UNITS
Oscar H. Banker, Chicago, Ill., assignor to New Products Corporation, Chicago, Ill., a corporation of Delaware
Application November 15, 1940, Serial No. 365,742
5 Claims. (Cl. 192—113)



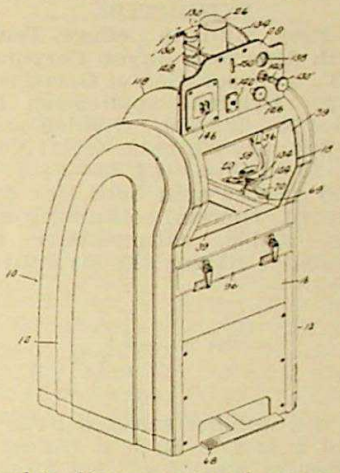
1. In a motor and clutch assembly, a clutch housing comprising an end wall in opposed spaced relation with an end of said clutch and a substantially circular side wall disposed spacedly about and substantially coaxially with said clutch, and an air intake line for said motor comprising a transfer duct communicating between said motor and an interior portion of said housing between said clutch end wall and said housing end wall spaced radially inwardly a substantial distance from said circular side wall, and an intake air duct communicating with an interior portion of the clutch housing at the opposite end of the clutch.

2,310,204
SCABBARD
Edwin L. Beckwith, Brookline, and Charles P. MacIver, Newton, Mass., assignors to Beckwith Manufacturing Company, Dover, N. H., a corporation of New Hampshire
Application September 13, 1940, Serial No. 356,638
7 Claims. (Cl. 224—2)



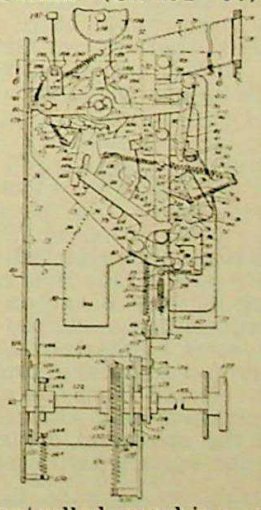
7. A scabbard fitting comprising a top plate having a bayonet receiving opening therein and also distinct small apertures, a sheet metal sleeve secured at one end to the top plate, being shaped to embrace the body of the scabbard and folded in each of its sides into an elongated chamber, and hook posts enclosed in said chambers, projecting up through the apertures of the top plate and shouldered to make interlocking engagement with the said top plate and with edges presented by parts of the sleeve.

2,310,205
CEMENT SPRAYING UNIT
Charles C. Bell, Marblehead, Mass., assignor to United Shoe Machinery Corporation, Borough of Flemington, N. J., a corporation of New Jersey
Application January 8, 1940, Serial No. 312,848
5 Claims. (Cl. 91—45)



1. In combination, a support, a spray gun, having a discharge valve, fixed to said support and depending therefrom, said spray gun being offset forwardly and to one side of its point of attachment, a cable extending from the point of attachment to said gun, means for connecting one end of the cable to the discharge valve, a rotatable sleeve mounted on the support, an arm connecting the opposite end of said cable to the sleeve, and means controlled by the operator for turning the sleeve thereby to move the cable.

2,310,206
FREE SERVICE COIN-CONTROLLED MACHINE
Harry S. Benjamin, Poughkeepsie, N. Y.
Application December 26, 1940, Serial No. 371,700
1 Claim. (Cl. 194—57)



In a coin-controlled machine, coin-operated service-rendering mechanism, a movable machine-operating member, a plurality of levers having coin-holding portions thereon, one of said levers being mounted on and movable with said operating member, means responsive to the motion of said operating member for moving the other levers to maintain their coin-holding portions in engagement with the coin, and free-serv-

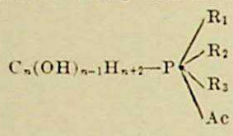
ice means responsive to the completion of a predetermined number of paid operations of said machine for conditioning said service mechanism to render said service in the absence of a coin.

2,310,207
SURFACE-ACTIVE INCRUSTATION INHIBITOR

Rudolph S. Bley, Milligan College, Tenn., assignor to North American Rayon Corporation, New York, N. Y., a corporation of Delaware

No Drawing. Original application October 7, 1938, Serial No. 233,826. Divided and this application January 29, 1940, Serial No. 316,279
10 Claims. (Cl. 18—54)

1. An acid viscose spin bath, for coagulating viscose filaments therein, containing a dissolved, substantially stable, cation-active mono-saccharide derivative having the structure:



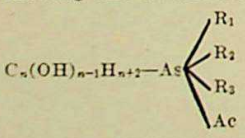
in which n is a number selected from the group consisting of 5 and 6, R_1 is a higher aliphatic radical having at least 8 carbon atoms, R_2 and R_3 represent substituents selected from the group consisting of lower aliphatic radicals, lower aromatic radicals and hydrogen, and Ac represents a substituent selected from the group consisting of OH and negative acid radicals, whereby incrustation of the spinneret during the spinning operation is substantially inhibited.

2,310,208
SURFACE-ACTIVE INCRUSTATION INHIBITOR

Rudolph S. Bley, Milligan College, Tenn., assignor to North American Rayon Corporation, New York, N. Y., a corporation of Delaware

No Drawing. Original application October 7, 1938, Serial No. 233,826. Divided and this application January 29, 1940, Serial No. 316,280
10 Claims. (Cl. 18—54)

1. An acid viscose spin bath, for coagulating viscose filaments therein, containing a dissolved, substantially stable, cation-active monosaccharide derivative having the structure:



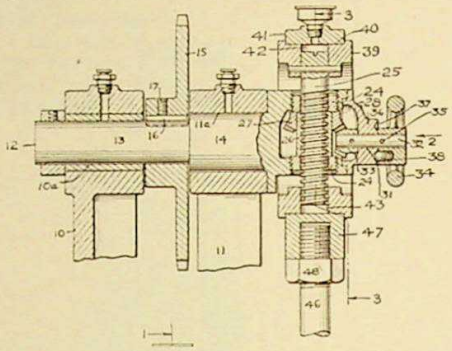
in which n is a number selected from the group consisting of 5 and 6, R_1 is a higher aliphatic radical having at least 8 carbon atoms, R_2 and R_3 represent substituents selected from the group consisting of lower aliphatic radicals, lower aromatic radicals and hydrogen, and Ac represents a substituent selected from the group consisting of OH and negative acid radicals, whereby incrustation of the spinneret during the spinning operation is substantially inhibited.

2,310,209
ADJUSTABLE ECCENTRIC

Samuel I. Bousman, San Francisco, Calif., assignor to Western Machinery Company, San Francisco, Calif., a corporation of Utah

Application March 31, 1942, Serial No. 436,999
4 Claims. (Cl. 74—571)

1. An adjustable eccentric comprising a hollow head having aligned transversely extending openings, an eccentric disk encircling the head, the eccentric disk having openings in alignment with the transverse openings, a threaded pin extending through the head and positioned with its ends in the openings in the eccentric disk, means interconnecting the pin and the disk to prevent both rotary and axial movement of the pin in the disk openings, a nut positioned in the hollow

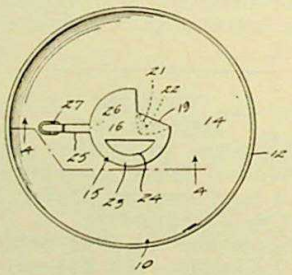


head and operatively connected with the pin, thrust abutments engaging opposite sides of the nut for resisting movement in the direction of the axis of the pin, at least one of said thrust abutments being threadedly connected with the head to effect adjustment for wear and means for turning the nut whereby the eccentric disk and the pin can be moved relative to the head to change the eccentricity of the disk.

2,310,210
CAN OPENER

Bergur L. Brynjolfsson, Chicago, Ill.

Application January 29, 1942, Serial No. 428,767
5 Claims. (Cl. 30—22)



1. A can opener comprising a body of relatively thin metal having an outwardly bowed edge portion and an outwardly diverging cut-out portion opening outwardly of said edge, a portion of the body, on one side of the cut-out portion, being disposed at an angle to the plane of the body and including an angular portion which projects toward the body, and which is tapered inwardly, and the outer end of the angular portion being relatively wide and sharpened to provide a cutting edge, said body having a finger grip portion, spaced from the angular portions and cut-out portion and adapted to be engaged by the thumb and index finger, said finger grip portion being provided with an opening.

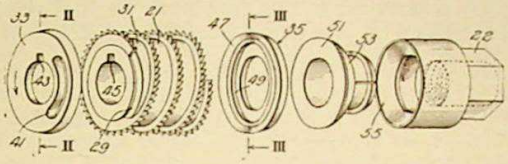
2,310,211
ROUGHING TOOL

Charles G. Brostrom, Salem, Mass., assignor to United Shoe Machinery Corporation, Flemington, N. J., a corporation of New Jersey

Application July 28, 1941, Serial No. 404,284
6 Claims. (Cl. 69—1)

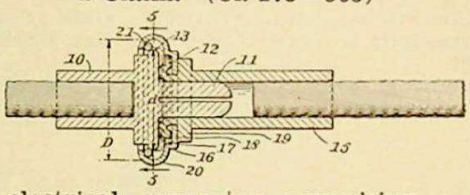
1. A tool for roughing shoe parts, comprising

a cylindrical hub and a helical, ribbon-like,



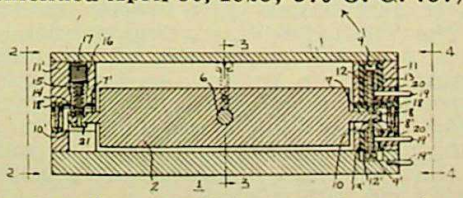
toothed, roughing element inserted in the convexed, peripheral surface of said hub.

2,310,212
ELECTRICAL CONNECTOR
Stephen N. Buchanan, Washington, D. C., assignor to Aircraft-Marine Products, Inc., Elizabeth, N. J., a corporation of New Jersey
Application April 23, 1941, Serial No. 389,965
1 Claim. (Cl. 173—363)



An electrical connector comprising a stud member and a housing member, said housing member being provided with a central axial bore having a circumferential recess adjacent its mouth to provide an inwardly facing cam surface, and an abutment at the inner end of the bore, said stud member including a forwardly facing surface adapted to contact with the abutment in the bore and a rearwardly facing cam surface, and a resilient ring in the recess of the housing member of such diameter as to bear entirely between the rearwardly facing cam surface of the stud member and the inwardly facing cam surface of the housing member when the forwardly facing surface of the stud member is in contact with the abutment of the housing member bore so as to exert tension to hold said surface in a firm, water-resistant, electrical contact with the abutment, said recess being of such radial depth as to permit said ring to expand into the same to clear the stud member cam surface when strong axial pull is exerted upon the connector.

2,310,213
ANGULAR CLASSIFYING ACCELEROMETER
James A. Buchanan, United States Navy
Application November 1, 1941, Serial No. 417,571
20 Claims. (Cl. 200—52)
(Granted under the act of March 3, 1883, as amended April 30, 1928; 370 O. G. 757)

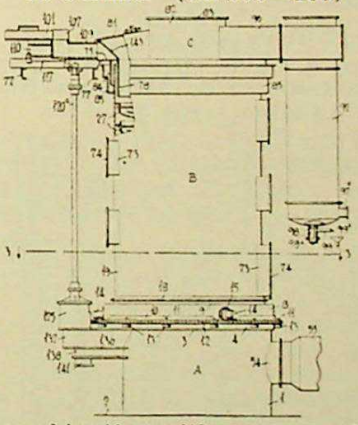


1. An angular classifying accelerometer comprising a support, an acceleration sensitive member having a contact carried thereby, a stationary contact carried by said support, means for pivotally supporting said member on said support in such manner that should said member be subjected to linear acceleration the algebraic sum of all moments resulting therefrom about said pivot would be equal to zero, means for applying a torque to urge said member rotationally about its pivotal support, said torque being sufficient to effect engagement between the contact on said acceleration sensitive member and said stationary contact only for such time as the angular acceleration to which said member may be subjected is less than a predetermined magnitude, and means for varying said torque.

2,310,214
ALLOY
Louis Henri François Canac and Emile Auguste Marie Antoine Segol, Toulon, Var, France, assignors to Société "Alliages Autoproteges," Paris (Seine), France, a society of France
No Drawing. Application May 13, 1940, Serial No. 334,986. In France July 11, 1936
7 Claims. (Cl. 75—147)

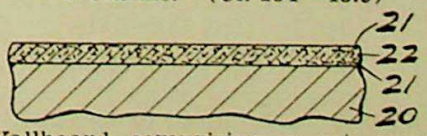
1. A corrosion resistive alloy having a surface formed of a multitude of galvanic couples which surface when subjected to corrosive influences is capable of forming a self-protective, cicatrizing, film, said alloy consisting of magnesium in an amount ranging from 10% to 50%, zirconium in an amount ranging from .05 to 2% and titanium in the amount of 1%, the balance being aluminium.

2,310,215
CONTINUOUS RETORT
McGarvey Cline, Jacksonville, Fla.
Application May 3, 1939, Serial No. 271,595
10 Claims. (Cl. 202—105)



1. The combination with a retort, of a conduit, one end of which is connected therewith at one point, a source of hot gases separate from said retort delivering into the other end of said conduit, a flue connected with said retort at another point, a pipe communicating with said flue and tapping said conduit at a point between its ends, means independent of said source for causing a forced circulation of gases through said conduit, retort, flue, and pipe, and means for deflecting and ejecting from said pipe at a pressure above atmospheric a portion of the gases flowing therethrough.

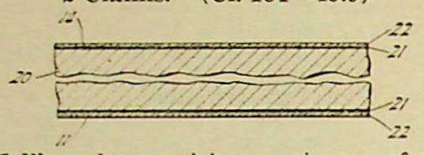
2,310,216
WALLBOARD
Dean D. Crandell, Buffalo, N. Y., assignor to National Gypsum Company, Buffalo, N. Y.
Application November 22, 1939, Serial No. 305,702
8 Claims. (Cl. 154—45.9)



1. Wallboard comprising a set cementitious

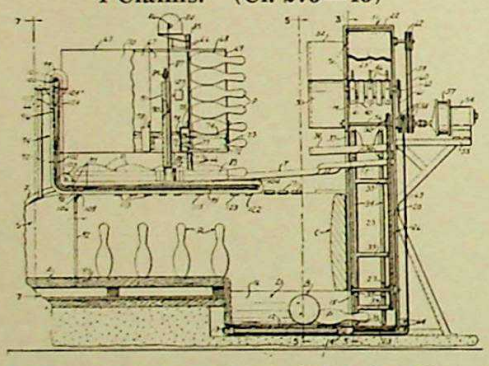
core and an enclosing envelope, said envelope comprising a paper sheet formed of relatively short, weak, water absorbent, waste fibers in contact with the core and of relatively long, strong, chemical fibers in the exposed surface of the sheet, said sheet weighing less than about 45 pounds per thousand square feet.

2,310,217
WALLBOARD
Dean D. Crandell, Buffalo, N. Y., assignor to National Gypsum Company, Buffalo, N. Y.
Application November 22, 1939, Serial No. 305,703
2 Claims. (Cl. 154—45.9)



1. Wallboard comprising a set core of gypsum and a multi-ply paper facing sheet bonded thereto, the plies of which possess different fiber compositions, said sheet having a thickness of less than about 0.015 inch and a weight of less than about 45 pounds per thousand square feet, the exposed surface of said sheet comprising a ply of waste fibers, the bonded surface comprising a ply of chemical fibers mixed with about 8% to 30% of waste fibers based upon the weight of the chemical fibers.

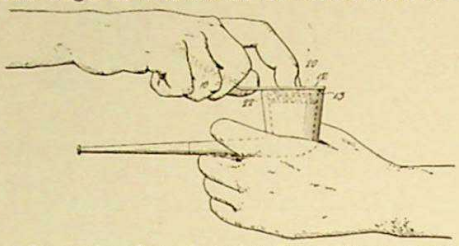
2,310,218
PIN SETTING APPARATUS
Wayne A. Davis, Minneapolis, Minn.
Application October 28, 1940, Serial No. 363,068
4 Claims. (Cl. 273—43)



1. Pin setting apparatus for a bowling alley, comprising a pin setter for setting pins upon the alley, a pin dropping mechanism for dropping pins in selected numbers into the said pin setter, a movable sweep member for sweeping fallen pins from the alley, electrically operated means for dropping pins from the dropping mechanism, switches arranged to be operated by movement of the sweep member, and remote control means for selectively completing circuits between the said switches and the electrically operated dropping means as the sweep member moves over the alley.

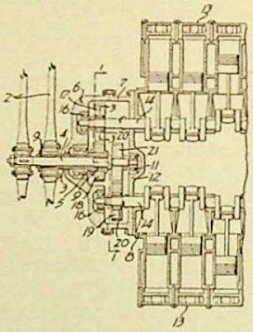
2,310,219
MATCH PACKAGE
Joe de Ganahl, McLean, Va.
Application July 17, 1939, Serial No. 284,997
6 Claims. (Cl. 131—247)

1. In a match package having a hinged front cover and a tab beneath which the free edge of the cover may be tucked when the package is closed, a disk-like flap hinged to said front cover remote from the matches when the package is open and adjacent the free edge of the cover whereby a portion of the flap may be tucked with the free edge of the cover beneath said tab when



the package is closed, said flap when swung outwardly of said cover being adapted to be used as a tamper for a smoker's pipe.

2,310,220
PROPULSION MECHANISM
Peter De Michelis, San Francisco, Calif., assignor of one-half to Peter J. Feykert, San Francisco, Calif.
Application January 21, 1939, Serial No. 252,155
1 Claim. (Cl. 170—135.5)



In combination, a pair of coaxial propellers, four in-line motors circumferentially disposed and equally spaced about the propeller axis, each motor having a shaft, said shafts being circumferentially disposed and equally spaced about said axis, a drive gear on each shaft, a driven gear connected with one of the propellers and meshed with a pair of said drive gears, a driven gear connected with the other propeller and meshed with another pair of the drive gears, and a wedging-roller one-way clutch interposed between each drive gear and its shaft.

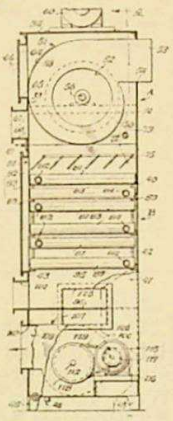
2,310,221
ARTIFICIAL FILAMENT AND THE LIKE
Russell O. Denyes, Pittsburgh, Pa., assignor to Tubize Chatillon Corporation, a corporation of Delaware
No Drawing. Application February 8, 1941, Serial No. 378,194
23 Claims. (Cl. 18—54)

11. The method of producing artificial filaments of a glycinin derivative which comprises dispersing glycinin in an alkaline solution in the presence of a hydroxyalkyl sulfoxylate, spinning the resulting dispersion in an acidic spinning bath, and collecting from the spinning bath the resulting filaments of precipitated glycinin alkyl sulfoxylate.

2,310,222
UNIT AIR CONDITIONER
Charles N. Deverall, Buffalo, N. Y., assignor to Niagara Blower Company, New York, N. Y., a corporation of New York
Application August 2, 1940, Serial No. 349,618
15 Claims. (Cl. 99—259)

1. An air conditioning unit for conditioning

the air in enclosures in which materials are processed, comprising a casing, a supply fan secured to said casing and having its inlet communicating with the interior thereof and its outlet adapted to deliver air to said enclosure, means for admitting return air from said enclosure into said casing at the end thereof opposite said supply fan, means adjacent said return air admitting means for admitting outside air into said casing,



heating coils arranged in said casing between said supply fan inlet and said return and outside air admitting means for heating the return and outside air drawn into said supply fan, a volume control damper housed in said casing and controlling the total volume of said return and outside air drawn through said casing and into said supply fan, and means for regulating said volume control damper.

2,310,223

LIQUID HARDENER SOLUTION

George T. Eaton and John I. Crabtree, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

No Drawing. Application August 19, 1941, Serial No. 407,452

18 Claims. (Cl. 95—88)

1. The method of hardening a photographic resin containing vinyl alcohol groups, comprising treating the resin with a solution of a zirconium salt.

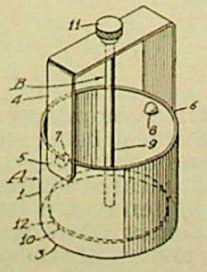
2,310,224

BISCUIT CUTTING DEVICE

Barton R. Edwards, Berkeley, Calif.

Application April 20, 1940, Serial No. 330,741

2 Claims. (Cl. 30—130)



1. A biscuit cutting device comprising a tubular member having its inner surface disposed adjacent to its lower edge chamfered to provide a cutting edge that has a straight outer wall that will cut a perfect cylindrical opening in the biscuit dough and an inclined inner surface that will press the periphery of the cut biscuit inwardly to a sufficient extent to cause it to adhere to the inner wall of the tubular member and be lifted when the tubular member is lifted, a U-shaped handle for the tubular member large enough to receive two fingers of the operator's hand, a lightweight plunger rod slidably carried by the handle and extending into the tubular member, a light weight non-perforated disc secured to the rod and being movable in the tubular member, the periphery of the disc being spaced inwardly from the inner wall of the tubular member for providing an annular air space, and a light weight knob secured to the free end of the rod and contacting with the handle for limiting the downward movement of the disc in the tubular member.

2,310,225

PROCESS OF ISOMERIZATION OF FATS AND OILS

William R. Eipper, Wilkes-Barre, Pa.

No Drawing. Application November 21, 1939, Serial No. 305,557

11 Claims. (Cl. 99—118)

8. A process for raising the melting point of a natural fat containing esters of oleic acid and its homologues comprising emulsifying the fat with water and converting the oleic acid esters and homologues into elaidic acid esters by isomerization including agitating the emulsion in the presence of an oxide of nitrogen.

2,310,226

PROCESS FOR THE MANUFACTURE OF PHOTOGRAPHIC MATERIALS

Béla Gáspár, Hollywood, Calif., assignor to Chromogen, Incorporated, a corporation of Nevada

No Drawing. Application July 19, 1940, Serial No. 346,435. In Great Britain July 19, 1939

6 Claims. (Cl. 95—7)

1. A process for producing layers for photographic purposes which comprises dissolving a dye-forming substance which is substantially insoluble in water in a solution comprising water and a quantity of a hydrotropic substance sufficient to form a true solution, incorporating a binding agent in said solution and then forming said solution into a layer.

2,310,227

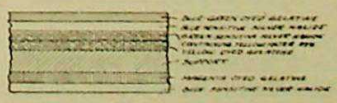
MATERIAL FOR THE PRODUCTION OF MULTICOLOR PHOTOGRAPHS

Béla Gáspár, Hollywood, Calif., assignor to Chromogen, Incorporated, a corporation of Nevada

Application May 27, 1939, Serial No. 276,238

In Great Britain June 14, 1938

4 Claims. (Cl. 95—2)



1. A light-sensitive multilayer material for the production of photographic dye images, comprising three selectively sensitive silver halide emulsion layers and three colored layers which are not light-sensitive, each of said colored layers being arranged in immediate contact with only

one of the light-sensitive layers and being dyed with a reducible dye resistant to ordinary photographic treating solutions and capable of being locally destroyed under the influence of a metallic silver image, the layers being so arranged that one outside layer is formed by a light-sensitive layer behind which there are arranged two of the colored layers, whereas the other outside layer is formed by the third colored layer behind which there are arranged the other two light-sensitive layers.

2,310,228

PROCESS FOR THE MANUFACTURE OF PHOTOGRAPHIC COLLOIDS

Béla Gáspár, Hollywood, Calif., assignor to Chromogen, Incorporated, a corporation of Nevada

No Drawing. Application April 14, 1939, Serial No. 267,905. In Great Britain May 11, 1938

7 Claims. (Cl. 95—7)

1. A process for producing colored layers for photographic purposes which comprises dissolving a dye which is substantially insoluble in water in a solution comprising water and a quantity of a hydrotropic substance sufficient to form a true solution, incorporating a binding agent into said colored solution and then pouring the colored solution to form a layer.

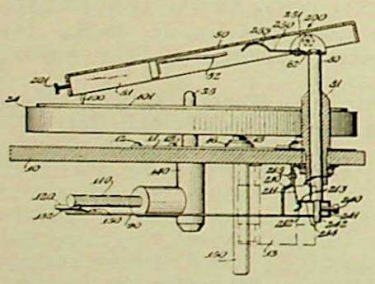
2,310,229

COMBINED SOUND REPRODUCING-RECORDING APPARATUS

Paul Stead Gay, Charlotte, Mich., assignor to Wilcox-Gay Corporation, Charlotte, Mich., a corporation of Michigan

Application March 3, 1941, Serial No. 381,555

10 Claims. (Cl. 274—13)



1. In sound recording and reproducing apparatus, a turn-table and means for driving the same; an operating arm carrying a sound translating element at one end and secured at the other end on a vertical post, said post being rotatable in a journal; said post carrying a feed arm, driving means for said feed arm; means for pivotally supporting said post in said journal in one position with the feed arm disengaged from its driving means; said post being slidable to another position in said journal and means for pivotally supporting said post in said other position for engaging said feed arm with its driving means.

2,310,230

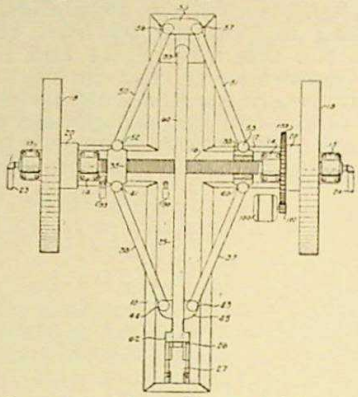
EXTRUSION PRESS

Harvey M. Gersman, New York, N. Y., assignor to Ferrex Corporation, New York, N. Y., a corporation of Delaware

Application August 10, 1939, Serial No. 289,445

8 Claims. (Cl. 207—9)

1. In an extrusion press, a base, an extrusion die, an extrusion ram, kinetic energy storage means to simultaneously move said die and said ram with respect to said base in a horizontal



plane and means to alternately connect said means to said die and ram to actuate the same.

2,310,231

BRAZING SOLDER

Melvin M. Goldsmith, Chicago, Ill., assignor to Goldsmith Bros. Smelting & Refining Company, a corporation of West Virginia

No Drawing. Application March 3, 1941, Serial No. 381,595

4 Claims. (Cl. 75—173)

4. A hard solder consisting of 0.05% to 5.00% of sodium, 40% to 60% of silver, the balance being all substantially from the group consisting of zinc, cadmium and copper, the zinc constituting from 17% to 21% thereof, the amount of cadmium being at least 11% and not more than 15%, and the amount of copper being from 16% to 20%, the amount of impurities being insufficient to alter the properties of the alloy.

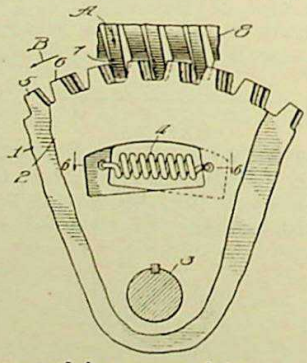
2,310,232

PRELOADED GEARS

Charles B. Hale, Chicago, Ill., assignor to Gear Specialties, a copartnership composed of Herman B. Gardner, Elsie Marie Gardner, Elmer H. Johnson, Elsie M. Johnson, Conrad N. Petersen, and Jennie Petersen, all of Chicago, Ill.

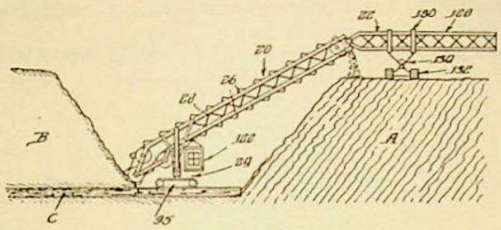
Application December 12, 1941, Serial No. 422,606

7 Claims. (Cl. 74—440)



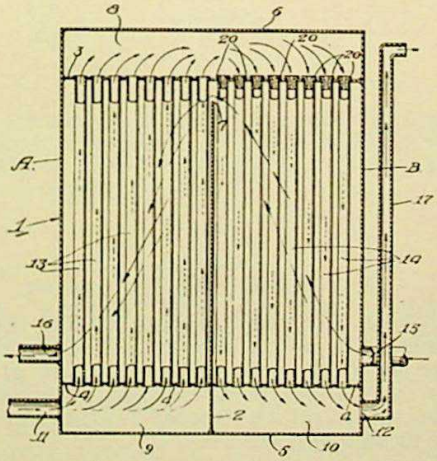
1. In a worm drive comprising a worm and a worm wheel, said wheel being divided into two sections on a plane containing the axis of the worm, and spring means connecting said sections together and tending constantly to hold them displaced somewhat angularly of each other, the helix angles of the worm and the wheel being unequal to such an extent that the worm thread contacts with the teeth of each wheel section only at points remote from said plane.

2,310,233
CONVEYOR-EXCAVATOR
Joseph Harrington, Riverside, Ill.
Application March 7, 1940, Serial No. 322,823
21 Claims. (Cl. 37—191)



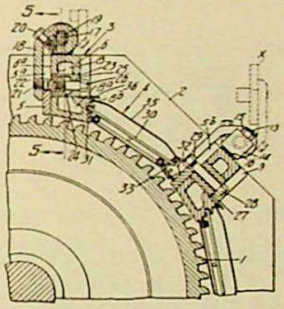
1. In an excavating device of the class described, digging means adapted to operate in a plane inclined to the horizontal for receiving excavated material at a lower level at its lower portion and conveying said material to a vertically spaced upper level, self propelled tractor means mounted for movement upon the material of the lower level for supporting the lower portion of said digging means at substantially said lower level, means for supporting the upper portion of said digging means, said lower support being horizontally shiftable on the material of said lower level for shifting said digging means, said upper support shiftably mounting said digging means for relative lateral shifting movement with respect to the upper support in response to the shifting of the lower support.

2,310,234
GAS CONDENSER
John S. Haug, Philadelphia, Pa., assignor to United Engineers & Constructors, Inc., a corporation of Delaware
Application September 27, 1939, Serial No. 296,724
6 Claims. (Cl. 257—224)



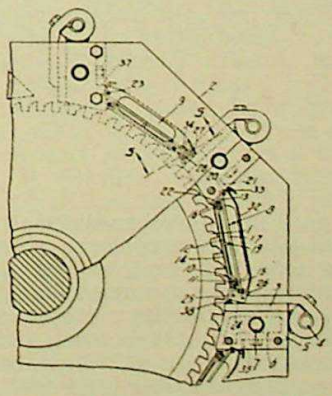
4. A gas condenser comprising an upper liquid chamber, a lower liquid chamber, a plurality of tubes extending from said upper liquid chamber to said lower liquid chamber to form a downpass section in which a liquid cooling medium passes downwardly, a shell about said tubes and associated with said upper liquid chamber and said lower liquid chamber in a manner to form a gas chamber through which the gas to be cooled is passed in indirect heat exchange relationship with said liquid cooling medium in said tubes, means for introducing liquid cooling medium into said upper liquid chamber for flow downwardly through said tubes, means for withdrawing liquid cooling medium from said lower liquid chamber after flowing downwardly through said tubes, and separate head increasing means associated with each of said tubes for increasing the head in said tube in the direction of downward flow of said liquid cooling medium as it flows downwardly through said tube, thereby largely preventing upward flow of said liquid cooling medium in any of said tubes due to a lower specific gravity of said liquid cooling medium upon reaching said lower liquid chamber as compared with the specific gravity of said liquid cooling medium when in said upper liquid chamber.

2,310,235
FLOCK CUTTER
Andrew Hauge, Claremont, N. H., assignor to Claremont Waste Manufacturing Company, a corporation of New Hampshire
Application July 18, 1940, Serial No. 346,186
15 Claims. (Cl. 83—6)



1. In combination, a rotary cutter, an enclosing casing therefor including fixed rails and cooperating cuttings removing structure therebetween, and stationary knives cooperating with said cutter and carried on said fixed rails, said cuttings removing structure being removable and said knives being hinged on said rails and movable about their hinges into exposed position upon removal of said cuttings removing structure.

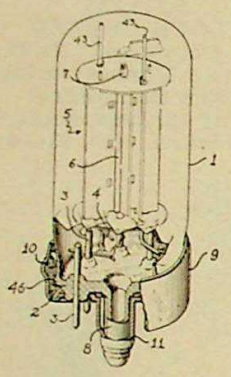
2,310,236
FLOCK CUTTING MACHINE
Andrew Hauge, Claremont, N. H., assignor to Claremont Waste Manufacturing Company, a corporation of New Hampshire
Application July 18, 1940, Serial No. 346,187
11 Claims. (Cl. 83—6)



1. In a flock cutter, a rotary cutter casing including longitudinal rails spaced from one another, a longitudinal screen unit support comprising a longitudinal member between said rails and adjacent one of the same, a screen supporting unit separably supported at its opposite longitudinal edges on said support and on the other rail and engageable by one longitudinal edge of said screen supporting unit, and means for enabling removal of said screen supporting unit in-

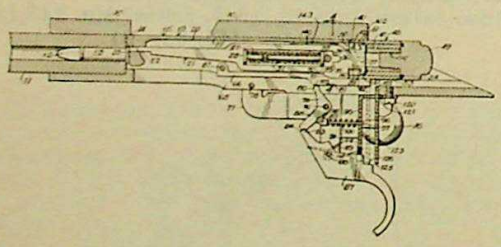
dependently of said screen unit support while the latter remains in operative position between said rails.

2,310,237
MOLDED STEM
Clarence A. Horn, Newton, Mass., assignor to Raytheon Production Corporation, Newton, Mass., a corporation of Delaware
Application February 24, 1939, Serial No. 258,263
4 Claims. (Cl. 250—27.5)



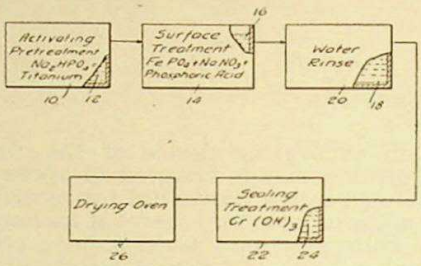
1. In combination, a stem assembly for electric tubes comprising a relatively thick glass wall member having substantially flat parallel upper and lower surfaces and a relatively thin glass sealing edge projecting from said wall member, and a plurality of lead-in conductors sealed into said wall member, and a glass envelope sealed only to the outer edge of said sealing edge.

2,310,238
FIREARM
Ole Horsrud, Fox River Grove, Ill., assignor to Sears, Roebuck and Co., Chicago, Ill., a corporation of New York
Application August 7, 1939, Serial No. 288,793
3 Claims. (Cl. 42—16)



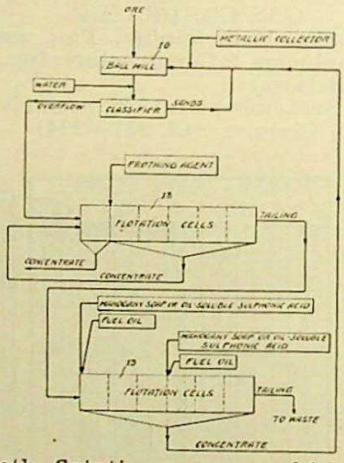
1. In a mechanism for maintaining a firing pin in cocked position, a receiver, a bolt therein, a striker in said bolt and having a forwardly facing shoulder, a sear mounted on said bolt and having a rearwardly facing shoulder engageable with the aforesaid shoulder when the striker is in cocked position, a lever pivotally supported from said receiver and engaged with said sear, a trigger supported from said receiver and holding said lever in engagement with said sear, and a spring for firing said striker, said spring being inoperative while said trigger holds said lever engaged with said sear, said trigger being disengageable from said lever to render said firing spring operative, at least one of said shoulders being inclined upwardly and forwardly to enable said striker to cam said shoulders apart when said spring becomes operative.

2,310,239
CORROSION RESISTANT COATING FOR METAL SURFACES
George W. Jernstedt, Bloomfield, N. J., assignor to Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa., a corporation of Pennsylvania
Application October 25, 1941, Serial No. 416,552
8 Claims. (Cl. 148—6)



1. A composition which when in aqueous solution is capable of activating ferrous and zinc metal surfaces to provide for the application of protective phosphate coatings which comprises disodium phosphate and more than 0.005% by weight of titanium, the titanium being present as a compound.

2,310,240
FLOTATION OF ORES
Walter E. Keck, Hancock, Mich.
Application October 2, 1939, Serial No. 297,453
10 Claims. (Cl. 209—166)

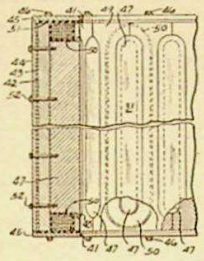


1. A froth flotation process which comprises agitating an aqueous suspension of an oxidized metallic sulphide ore in the presence of a mahogany sulphonate to cause said mahogany sulphonate to collect the metal bearing ore at the surface of said suspension.

2,310,241
MAGNETIC BUCKET AND METHOD OF CONVEYING MATERIAL
Herbert W. Kelly, Chicago, Ill., assignor to Mechanite Metal Corporation, a corporation of Tennessee
Application February 19, 1942, Serial No. 431,557
13 Claims. (Cl. 294—65.5)

7. In a cupola charging apparatus, the combination of a bottomless and topless bucket and electro-magnetic means including a plurality of magnets of opposite polarity spatially disposed in, and carried by, the bucket for magnetizing magnetic material loaded in said bucket to retain in the bucket, upon energization of the electro-

magnetic means, material loaded in the bucket through the upper end thereof, and to release from the bucket through the lower end thereof,



upon de-energization of the electro-magnetic means, the said retained material in charging said cupola.

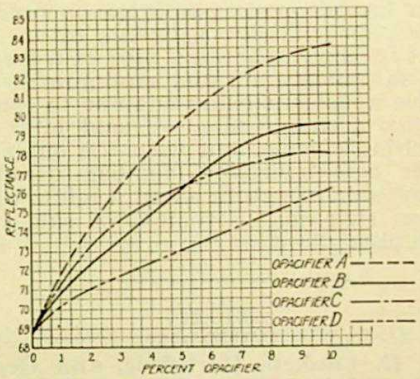
2,310,242

ZIRCONIUM OXIDE OPACIFIER AND METHOD OF MAKING SAME

Charles J. Kinzie, Niagara Falls, N. Y., assignor to The Titanium Alloy Manufacturing Company, New York, N. Y., a corporation of Maine

Application November 1, 1938, Serial No. 238,139

7 Claims. (Cl. 106—312)



4. A substantially white opacifier composition comprising crystalline zirconia intimately associated with a minor quantity of gelatinous zirconium hydrate.

2,310,243

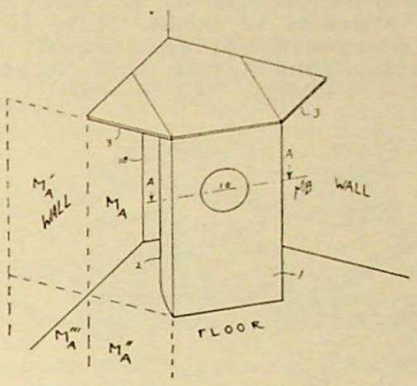
HORN FOR LOUD-SPEAKER

Paul W. Klipsch, Houston, Tex., assignor of twenty per cent to Ray L. Smith, Houston, Tex.

Application February 5, 1940, Serial No. 317,260

7 Claims. (Cl. 181—27)

1. In a loud speaker horn adapted to be located in a corner formed by and to cooperate with three mutually perpendicular walls so that said walls together with the horn structure form a part of the horn the combination of, a pair of non-parallel baffles perpendicular to one of said surfaces, a panel extending between said baffles at their most widely separated edges and transversely of the plane bisecting the angle formed by the other two of said mutually perpendicular walls, a cover fitting upon said panel and parallel to said first surface and baffles, said cover extending sidewardly therefrom to abut the two side walls, said baffles being more closely spaced to said side walls at their most closely spaced edges than at their most widely spaced edges by an amount substantially of the rate of one-half for each increment of length along the side walls of $\lambda_0/18$ where λ_0 is the longest wave length to be transmitted by said horn, and means within the enclosure formed between the pair of baffles forming an elongated horn section, said



section at its large end communicating with the air column formed by the baffles and the side wall surfaces and at its small end communicating with a sound source.

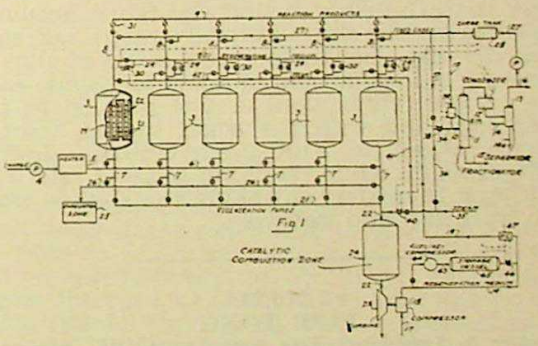
2,310,244

CONTROL OF CYCLIC OPERATIONS

Raymond C. Lassiat, Swarthmore, Pa., assignor to Houdry Process Corporation, Wilmington, Del., a corporation of Delaware

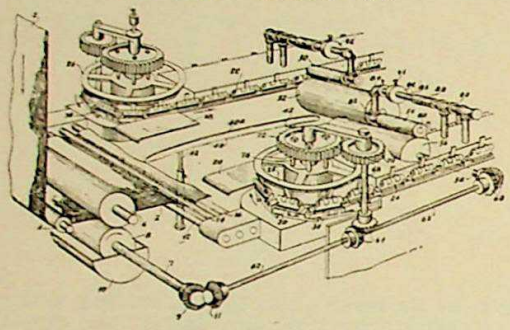
Application October 13, 1939, Serial No. 299,247

15 Claims. (Cl. 196—52)



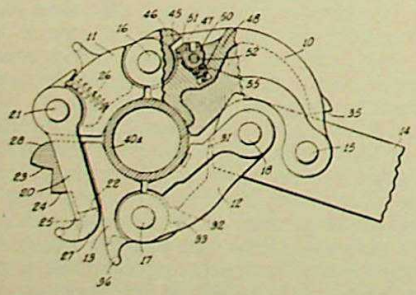
9. In forming hydrocarbon reaction products by contact operations followed by treatment of the resulting products to separate them into fractions including ordinarily gaseous material and involving use of a contact mass disposed in a battery of converters engaged in a cyclic process wherein the mass is alternately on-stream and receiving reactants and in regeneration to remove contaminating deposit resulting from the on-stream reactions, and the operating periods of the converters in the battery are differently timed to provide continuous and substantially constant flow of said reactants to the battery and of the hydrocarbon products to the separating treatment, the process steps comprising applying vacuum to one of the converters following a regeneration period therein to assist in purging regeneration fluid therefrom, then before again admitting on-stream reactants to the converter raising the pressure within it toward on-stream level by admitting to it hydrocarbon products diverted from the stream of the same flowing from the battery, and in response to diversion of hydrocarbon products into the purged converter admitting to the stream of products undergoing further treatment a controlled quantity of said ordinarily gaseous material thereby to avoid flow and pressure surges through the treating zone.

2,310,245
FABRIC TREATMENT
Harry D. Learnard, Andover, Norman A. Sykes, Methuen, and Arthur R. Wachter, Reading, Mass., assignors to Pacific Mills, Lawrence, Mass., a corporation of Massachusetts
Application June 14, 1940, Serial No. 340,625
5 Claims. (Cl. 26—60)



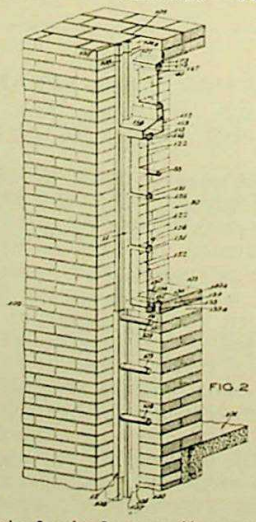
1. The treatment of cloth to impart to it a substantially uniform predetermined width which consists in wetting a web of cloth that is wider than said predetermined width and has irregular selvage edges, advancing the moist web of cloth to feed its selvages with the open clips of two oppositely disposed series of moving tenter clips introducing weft slack into the web by engaging the web and withdrawing its selvages outwardly of the open clips, diverging the moving tenter clips to effect automatic closure on the opposite selvages of the fabric while the fabric is advancing faster than the clips so that the fabric accumulates between the clips to provide warp slack, subsequently disposing the opposite series of clips in parallel relationship spaced apart to dispose each edge of the fabric along a line parallel to the other edge and with the edges spaced apart a distance equal to said predetermined desired width of cloth, while retaining some of said weft slack, and thereafter shrinking the slacked cloth both warpwise and weftwise.

2,310,246
PIPE TONG
Chester A. Lundeen, Los Angeles, Calif., assignor to Byron Jackson Co., Huntington Park, Calif., a corporation of Delaware
Application October 5, 1940, Serial No. 359,927
3 Claims. (Cl. 81—66)



1. A multiple-size pipe tong comprising a lever, a pair of independent pipe-encirling members pivotally connected to the lever at spaced points thereon whereby swinging movement of the lever in one direction or the other loosens or constricts the members about a pipe, latch means mounted on the outer end of one member and adapted to engage the outer end of the other member to detachably connect the outer ends of said members together about a pipe, spring means urging said latch means in latching direction, one of said members comprising a first jaw segment pivotally connected at one end to said lever and a second jaw segment pivotally connected to the opposite end of said first jaw segment, stop means between said first jaw segment and said lever operable upon swinging movement of said lever in jaw-loosening direction to cause said first jaw segment to move into engagement with the pipe, abutment surfaces on said first and second jaw segments cooperating to limit the opening movement between said segments to an amount sufficient to accommodate the maximum sized pipe, said abutment surfaces also cooperating to move said second jaw segment toward the pipe upon swinging movement of said lever in jaw-loosening direction, the relationship between said abutment surfaces being such as to cause said second jaw segment to move said latch means into latching engagement with the outer end of the other pipe-encircling member to automatically latch said members about a maximum sized pipe but being normally ineffectual to cause the second jaw segment to move the latch means into latching engagement with the outer end of the other pipe-encircling member when the tong is applied to a minimum sized pipe, and an adjustable abutment on one of said jaw segments adapted when adjusted to operative position to cooperate with the other jaw segment to limit the opening movement between said jaw segments to an amount sufficient to accommodate a pipe of a size intermediate said maximum and minimum sizes, said adjustable abutment being adapted to cause said second jaw segment to move said latch means into latching engagement with the outer end of the other pipe-encircling member to automatically latch said members about a minimum sized pipe upon swinging movement of said lever in jaw-loosening direction.

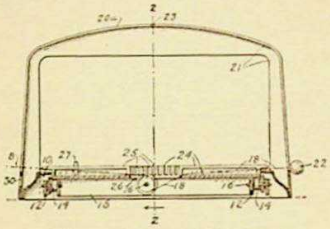
2,310,247
WINDOW
Edmund H. Lunken, Hartsdale, and George A. Just, Scarsdale, N. Y., assignors to Lunken-Just Window Corporation, Scarsdale, N. Y., a corporation of New York
Application April 6, 1939, Serial No. 266,272
1 Claim. (Cl. 189—72)



A prefabricated window unit comprising jambs, guides on the jambs, a head stop, a sash and a sill, and means for connecting said jambs to the jambs of other units for arranging said unit with other units in registering pilaster formation, the with each other and forming a continuous guide,

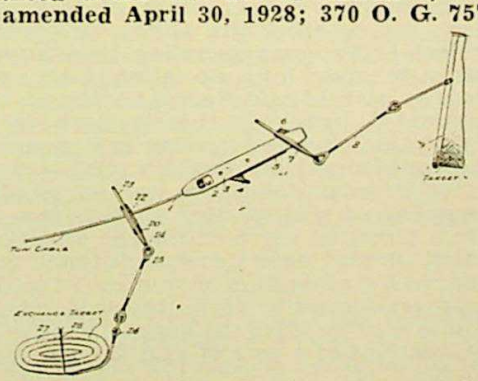
guides of vertically aligned jambs registering said sash being slidable on the guides of vertically adjacent units.

2,310,248
CHEESE CUTTING MACHINE
Joseph A. Marquis and Albert G. Stephenson, Seattle, Wash.
Application May 10, 1941, Serial No. 392,860
6 Claims. (Cl. 31—22)



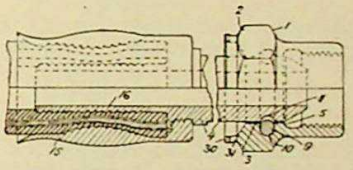
1. In a machine for cutting cheeses and the like, the combination of a base that includes bearing-elements, a radially slotted table mounted for rotation on said base and having its axis of rotation vertically disposed, a winding drum rotatably connected to one of said bearing elements, a cutting wire having an end secured to said drum, a spring engaged with said winding drum in operable relation for rotating the drum so as to wind a portion of said cutting wire on the drum, and an arch united with opposite sides of said base and having a wire-guiding edge that extends horizontally from a point above the axis of the table and downwardly to points radially beyond and below diametrically opposite points of the table, said cutting wire having an unwound part that extends from said winding drum to and beyond said wire-guiding edge and terminating in a handle, for purposes specified.

2,310,249
AERODYNAMIC RELEASE DRAG FOR TOW TARGETS
James J. Maskey, Dayton, Ohio
Application May 26, 1941, Serial No. 395,251
1 Claim. (Cl. 273—105.3)
(Granted under the act of March 3, 1883, as amended April 30, 1928; 370 O. G. 757)



In apparatus for exchanging an aerial target towed by an aircraft tow line with a replacement target comprising, in combination with said tow line, a target-release device secured to the towing end of said line including a trigger-actuated target-release mechanism operative upon actuation of said trigger to release a target being towed and to automtically reset to couple an exchange target in towing relation with said tow line upon release of said trigger, a traveler in the form of a disk having a centrally disposed annular guide providing an enlarged central aperture providing for movement of the traveler along the tow line, and means for securing an exchange target to the traveler, the said disc forming the traveler having a diameter such that aerodynamic lift and drag forces acting thereon are sufficient to propel the target along the tow line and lift the same along the upwardly inclined portions thereof, and said traveler, by means of the aperture therein, being adapted to slide over the body of the target-release mechanism to actuate the target trigger to release the target being towed and to couple the exchange target to the tow line.

2,310,250
COUPLING
Walter Arthur Melsom, Willesden Junction, London, England, assignor to Bowden (Engineers) Limited, London, England, a British company
Application May 21, 1940, Serial No. 336,367
In Great Britain April 10, 1940
1 Claim. (Cl. 285—84)

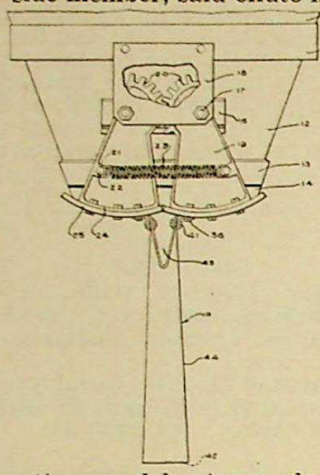


A medium or high pressure hose coupling component, comprising a flexible hose having tubular walls of rubber or like material and at least one tubular reinforcing layer, a one-piece hollow metal insert having an externally reduced portion inserted in the bore of said hose and an enlarged portion beyond the end of the hose terminating in an outer end portion adapted to be brought into sealing relation end to end with a companion fitting, a separate metal sleeve member having a circumferentially continuous wall which is radially contracted around the hose to grip the hose firmly between itself and the insert and seal the inner wall of the hose with the insert, said sleeve extending beyond the end of the hose so as to circumferentially engage the said enlarged portion of the insert, cooperative means interlocking said sleeve and insert together beyond the end of the hose against relative axial movement in either direction, a nut slidable over the said fitting engaging end portion of the insert extending beyond the end of said sleeve and said axial interlock, the inner wall of the nut and the one-piece insert where the integral outer portion thereof projects beyond said axial interlock with the sleeve each having an annular groove, said grooves registering to form a ring shaped passage and means introduced into and around the said passage to transmit the end thrust of the nut to the one-piece insert when the insert and its companion fitting are being sealed end to end by screwing said nut to the part to which the coupling component is to be fitted.

2,310,251
EXPANSIBLE CHUTE
George A. Mashon, Los Angeles, Calif., assignor to Garlinghouse Brothers, a copartnership composed of L. H. Garlinghouse, A. F. Garlinghouse, and C. H. Jeffries
Application October 27, 1941, Serial No. 416,643
6 Claims. (Cl. 193—25)

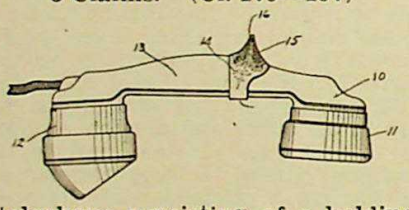
1. In a hopper construction, a receptacle, said receptacle having a discharge opening, a gate movable to open and close the said opening, a chute below said opening, said chute including a

pair of side members, one of said side members being connected to said gate, means to support the other side member, said chute members hav-



ing end portions and having a slack portion in the upper end of the end portions when the gate is closed.

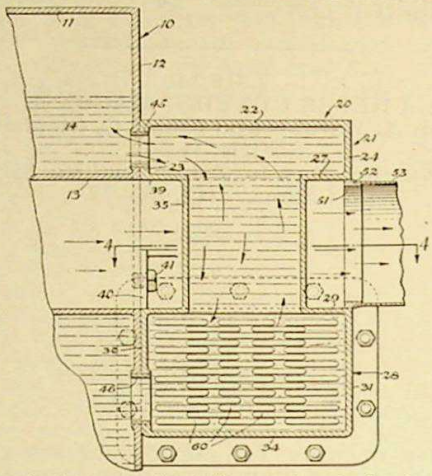
2,310,252
TELEPHONE SUPPORT
Paul C. Moomaw, Waynesboro, Pa.
Application March 15, 1940, Serial No. 324,211
3 Claims. (Cl. 179—157)



1. A telephone consisting of a holding member, a receiver at one end thereof, a transmitter at the other end thereof, a device removably and adjustably attached to said holding member at a point nearer to said receiver than to said transmitter and having a substantially cone-shaped protruding portion adapted to engage the shoulder of the user whereby said telephone may be held between the ear and another portion of the body, and a strap for securing said device to said holding member in any angular position.

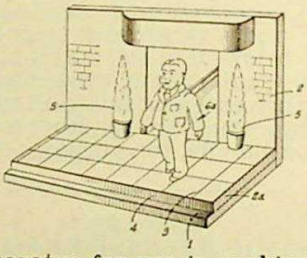
2,310,253
WATER HEATER
Harry S. Murphy, Buffalo, N. Y., assignor to Coreco, Inc., Buffalo, N. Y., a corporation of New York
Application July 5, 1940, Serial No. 344,093
1 Claim. (Cl. 122—32)

In combination with a boiler containing a body of water and having a flue, a water heater comprising a shell fitting said boiler, said shell being provided in its upper part with an opening registering with an opening provided in said boiler below the level of the water therein and providing free communication between the water in said boiler and the water in said shell, means providing communication between the lower part of said shell and said boiler thereby to permit of a vertical circulation of boiler water by gravity through said shell, means for conducting the flue gases from said boiler in contact with the external surface of said shell thereby to heat the boiler water contained therein, and a heat exchanger including a header secured to the exterior of said shell and tubes extending into said shell and immersed in the boiler water therein, said header and tubes of said heat exchanger be-



ing adapted to conduct the water to be heated in heat exchanging relation to the boiler water in said shell.

2,310,254
APPARATUS FOR PRODUCING ANIMATED PICTURES
Edward Nassour, Los Angeles, Calif.
Application October 16, 1939, Serial No. 299,644
3 Claims. (Cl. 88—16)

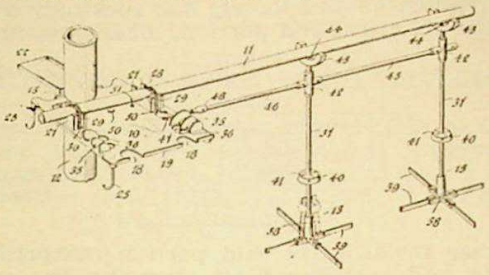


1. An apparatus for use in making a sequence of photographs representing the location and animative aspect of a moving object at sucecssive equal time intervals comprising: a set of figures, one for each of said time intervals, each a complete perspective representation of said object and each representing the animative aspect of said object at the corresponding time interval; a locating member for association with any of said figures, each of said figures having an aperture extended upwardly therethrough for receiving said member and holding said member in a predetermined angular position relative to said figure; and means defining a pair of points on the lower end of said member spaced from each other in a direction representing the direction of movement of said object and a distance corresponding to the amount of movement of said object between successive time intervals, whereby said points may indicate the desired relative successive locations of a pair of said figures.

2,310,255
PIPE HANDLING EQUIPMENT
Maurice M. O'Connell, Buffalo, N. Y.
Application April 7, 1941, Serial No. 387,175
2 Claims. (Cl. 81—41)

1. Pipe handling equipment of the character described, comprising a platform adapted to be attached to a supporting post of a building and having vises thereon for receiving and clamping a section of pipe to be operated upon, a coupling member adjustably mounted on said platform to

assume an operative position at one side or the other thereof, a floor-engaging device spaced from the platform and provided at its upper end with a member for receiving the extended end



of such pipe-section, and means applied to said device for detachably connecting it to said platform coupling member to maintain the former in fixed relation to the latter.

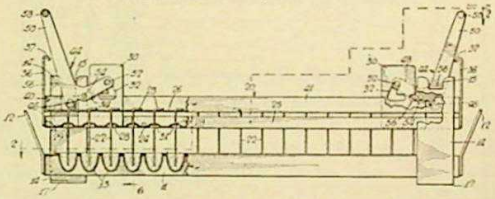
2,310,256

APPARATUS FOR MANUFACTURING FROZEN CONFECTIONS

Leo D. Overland, Brooklyn, N. Y., assignor to Joe Lowe Corporation, New York, N. Y., a corporation of Delaware

Application November 20, 1940, Serial No. 366,410

8 Claims. (Cl. 107—8)



1. A portable apparatus of the character described comprising a pair of superimposed slidably mounted plates, the lower plate having a plurality of spaced apertures therein and the upper plate having a plurality of similarly spaced depending spurs adapted to extend through said apertures, said lower plate having adjacent each end a pair of oppositely spaced guide members projecting therefrom towards the other plate, each guide member being provided with a pair of cam conformations the other plate having a pair of oppositely spaced plural-armed levers pivotally mounted thereon in spaced relation adjacent said guide members, one arm of each lever having a pair of cam members which are adapted to engage the cam conformations of its adjacent guide member, and the other arms of each pair of levers being connected to provide a pair of spaced handles for manipulating and operating the apparatus.

2,310,257

IMPREGNATING AGENT FOR VEGETABLE FIBROUS MATERIALS

Ludwig Ritter, The Hague, Netherlands, assignor, by direct and mesne assignments, to Albi Chemical Corporation, New York, N. Y., a corporation of New York

No Drawing. Application December 2, 1940, Serial No. 368,253. In the Netherlands September 11, 1940

11 Claims. (Cl. 167—16)

4. A composition for preserving fibrous materials by combating harmful micro-organisms, comprising an aqueous solution containing at least one substance of the group consisting of copper fluoride, copper arsenite, and copper arsenate; further ammonia, a hydroxy amine of low volatility and having a marked stabilizing effect on copper ammonia compounds in dilute aqueous solutions and improving the impregnating and wetting properties of said solutions, and a mordant consisting of a mixture containing phthalic acid and naphthol compounds.

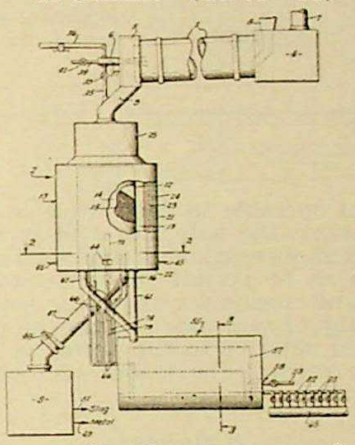
2,310,258

PROCESS FOR RECOVERING MANGANESE FROM ORE

Elfego Riveroll, Hermosa Beach, Calif.

Application August 11, 1941, Serial No. 406,312

12 Claims. (Cl. 75—80)



1. A process for the recovery of manganese from an ore containing an oxide thereof higher than MnO, which comprises: passing the ore in divided condition in contact with hot combustion gases in a first stage in which the ore is free to expand on heating, to remove water present in the ore and heat the ore to a temperature between about 400° C. and about 900° C.; delivering the dried and heated ore from the first stage into an enclosed vertically extending chamber and maintaining a vertically extending body of such ore within said chamber for treatment in a second stage; supplying heat to said ore body through the walls of said chamber in a heated zone extending throughout a major portion of the height of said ore body, to maintain said ore body at a temperature between about 400° C. and 900° C. within said zone; introducing a preheated hydrocarbon gas into contact with the ore in said body at a plurality of positions intermediate the height of said heated zone, to cause reduction of manganese in said ore within the body to a state of oxidation lower than Mn_3O_4 and partially to metallic manganese; removing from the lower end of the ore body partially reduced ore containing manganese completely reduced to a state of oxidation lower than Mn_3O_4 and partially reduced to metallic state; subjecting the ore so removed, in a third stage, to further heating in the presence of a solid reducing agent at a temperature sufficient to complete the reduction of the manganese to the metallic state and cause fusion thereof; and recovering the resulting metallic manganese.

2,310,259

STOCK FEED FOR AUTOMATIC SCREW MACHINES

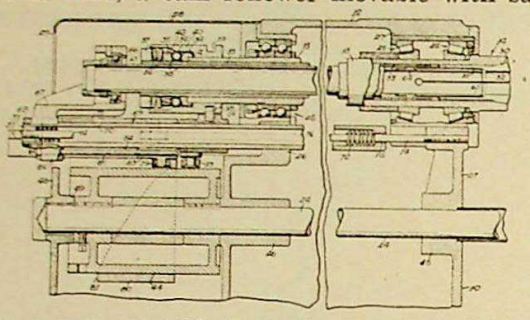
Harry W. Ruppel, Cleveland, Ohio, assignor to The Foote-Burt Company, Cleveland, Ohio, a corporation of Ohio

Application May 11, 1940, Serial No. 334,626

13 Claims. (Cl. 29—62)

1. A stock feed mechanism for automatic screw

machines comprising, in combination, a hollow spindle, a stock feed tube reciprocable longitudinally in said spindle and adapted to receive a bar of stock and in each forward movement to advance said stock a predetermined extent through said spindle, spring means tending to move said tube in a forward direction, positive stop means for limiting the forward movement of said tube, a cam follower movable with said



tube, a cam operable in each cycle to shift said follower against the action of said spring means in a return movement and then to release said follower so as to permit forward movement of said tube, and means for adjusting said follower longitudinally of said tube to vary the position of said follower relative to the throw of said cam, whereby to control the extent of movement of said tube.

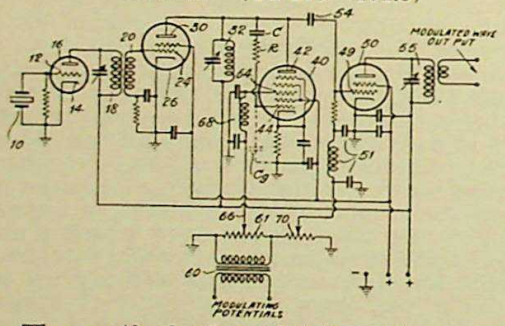
2,310,260

WAVE LENGTH MODULATION

Robert E. Schock, Riverhead, N. Y., assignor to Radio Corporation of America, a corporation of Delaware

Application July 18, 1940, Serial No. 346,079

7 Claims. (Cl. 179—171.5)



1. The method of modulating the length of wave energy in accordance with control potentials and of compensating for or cancelling out any undesired amplitude modulation of said wave energy accomplished during said wave length modulation process which includes the steps of, producing wave energy of carrier wave frequency, modulating the wave length of said produced wave energy in accordance with signalling potentials, multiplying the frequency of said wave length modulated wave energy and modulating the amplitude of the wave energy of multiplied frequency in a sense to compensate any undesired amplitude modulations thereon.

2,310,261

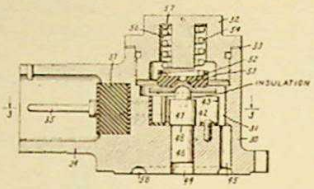
PRESSURE RESPONSIVE DEVICE

Paul J. Schwarzhaupt, Scotia, and Kenneth A. Killam and Laurens A. Taylor, Schenectady, N. Y., assignors to General Electric Company, a corporation of New York

Application February 1, 1941, Serial No. 377,034

6 Claims. (Cl. 200—82)

1. Pressure responsive device comprising a housing having a bore for connection to a source of fluid under pressure, a plunger slidably projecting into the bore and having an upper spherical end portion, a member with a central spherical depression loosely and rockingly engaging the spherical end portion, means biasing the



member towards the end portion comprising a spring and a spring plate engaging the spring and having a central depression in engagement with the central portion of the member, and means controlled in response to movement of said member.

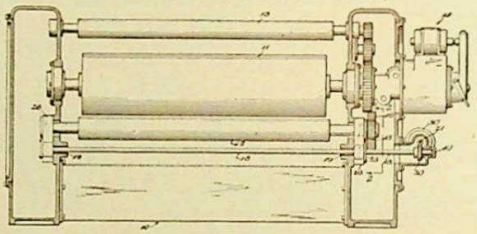
2,310,262

PRESSURE ROLL ADJUSTMENT

Albert F. Shields, Jamaica, N. Y., assignor to S. & S. Corrugated Paper Machinery Co., Inc., Brooklyn, N. Y., a corporation of New York

Application April 5, 1940, Serial No. 328,091

4 Claims. (Cl. 101—407)



1. A printing machine comprising a printing roll and a pressure roll, said pressure roll being adjustable with relation to said printing roll, an adjustable mounting for said pressure roll, said mounting comprising a bracket, a pivotal mounting for said bracket, said pressure roll being rotatably mounted on said bracket, a source of power, a driving means between said source of power and said pressure roll, said driving means comprising a gear rotatably mounted concentrically of the pivotal mounting of said bracket, said pressure roll carrying a gear meshing with said driving gear, said gears meshing with each other irrespective of the position of said bracket and means for rotating said bracket about its pivotal mounting within predetermined limits, each end of said driven rotatable pressure roll being supported in a similar bracket, each of said brackets being simultaneously rotatable, said means for rotating said brackets comprising a shaft carrying a pair of cams, each cam registering with a perforation in a slide of a bracket, each slide being slidably mounted in a slot of a bracket and means for rotating said shaft whereby each end of said adjustably mounted pressure roll may be moved simultaneously.

2,310,263

METHOD OF MAKING DEXTRAN

Grant L. Stahly, Columbus, Ohio, assignor to The Commonwealth Engineering Company of Ohio, Dayton, Ohio, a corporation of Ohio

No Drawing. Application March 20, 1940, Serial No. 325,049

1 Claim. (Cl. 195—31)

An improved method of producing dextran comprising adding one part of a filtrate obtained by adjusting to a pH of about 7 a water extract

of waste sugar-refining charcoal to about 100 parts of culture medium containing sucrose and fermenting this medium with bacteria of the *Leuconostoc mesenteroides* species.

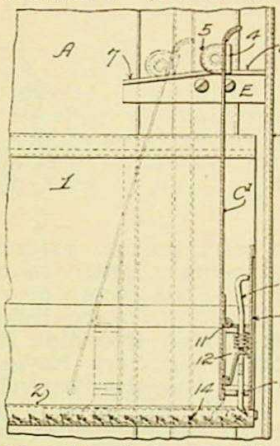
2,310,264

ERECTION MEANS FOR FILING MATERIAL SUPPORT

Clarence W. Straubel, Youngstown, Ohio, assignor to The General Fireproofing Company, Youngstown, Ohio, a corporation of Ohio

Application October 20, 1941, Serial No. 415,843

6 Claims. (Cl. 45—2)



1. In a filing cabinet, in combination with a cabinet including side and rear walls, a drawer including a drawer head and side walls and slidably mounted in the cabinet between said side walls to move toward and from the rear wall, a filing material support pivotally mounted at its lower end in the drawer inwardly of the drawer head and having its upper end extending above the side walls of the drawer, and cooperating means respectively on the upper side edge portion of the support and a wall of the cabinet for lifting said support from a rearwardly inclined position to a substantially vertical position as the drawer is fully moved into the cabinet.

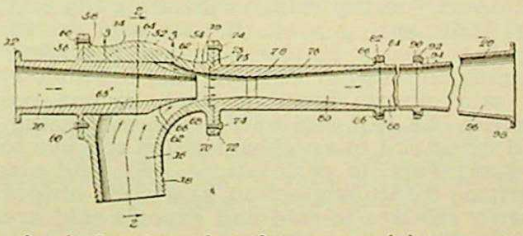
2,310,265

PNEUMATIC CONVEYING APPARATUS

Robert P. Sweeny, Atlanta, Ga.

Application September 18, 1939, Serial No. 295,514

5 Claims. (Cl. 302—25)



1. An induction chamber comprising a curved shell having a central chamber, an output opening through one side wall thereof, an intake opening through the side wall opposite said outlet opening, and an input opening through another side wall thereof, the interior of the wall of said shell from the input opening to said output opening being, in longitudinal cross-section, entirely concavo-convex and of continuous, regular curvature, and a nozzle extending through said intake opening and across said central chamber substantially to said output opening, said nozzle comprising a pipe having the outer side thereof adjacent the outlet end curved inwardly from a point substantially set back from said outlet end to said end, and a longitudinally extending rib, said rib being in plane which includes the longitudinal axis of said nozzle said rib depending inwardly from the wall of said shell, opposite said second input opening, the free edge of said rib being adjacent to said nozzle.

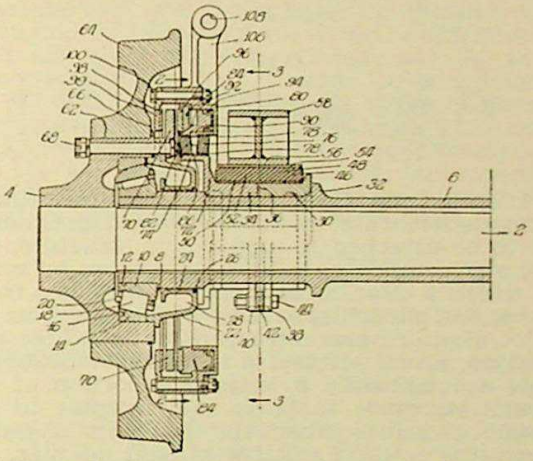
2,310,266

ROTOR BRAKE

Carl E. Tack and Wesley A. Helsten, Chicago, Ill., assignors to American Steel Foundries, Chicago, Ill., a corporation of New Jersey

Application December 30, 1940, Serial No. 372,366

26 Claims. (Cl. 188—153)



1. In a brake arrangement, a wheel and axle assembly having a wheel at the end thereof, a pedestal block supported on said assembly inboard said wheel, a rotor carried on the inboard face of said wheel, a cylinder resiliently supported from said block, a ring piston operable in said cylinder, and stators supported from said cylinder and said piston at opposite sides of said rotor for engagement therewith, said piston being resiliently supported from said block, the resilient supports of said piston and said cylinder being under reverse stress with respect to each other to urge said cylinder and said piston into normal relationship with each other, said resilient supports serving as release means respectively for said piston and said cylinder casting upon release of the brakes.

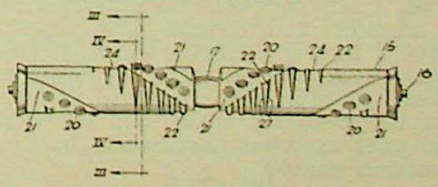
2,310,267

SUCTION CLEANER APPARATUS

Charles H. Taylor, Springfield, Mass., assignor to Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa., a corporation of Pennsylvania

Application June 7, 1940, Serial No. 339,242

13 Claims. (Cl. 15—6)



5. A brush roll for suction cleaners comprising a revolubly mounted body, tufts of bristles mounted spirally upon said body, said body being provided with a plurality of parters, said parters extending from adjacent said tufts of bristles around said body in a generally circumferential direction, said parters being arranged

in spiral formation about said body, said tufts of bristles being disposed adjacent and in line with the leaving end of said parters.

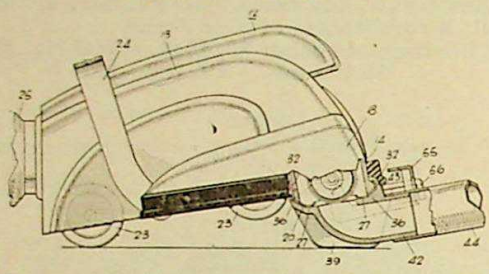
2,310,268

SUCTION CLEANING APPARATUS

Charles H. Taylor, Springfield, Mass., assignor to Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa., a corporation of Pennsylvania

Application July 6, 1940, Serial No. 344,214

8 Claims. (Cl. 15—9)



1. In combination, a suction cleaner including a nozzle structure, an attachment adapter adapted to be attached to said nozzle structure, said adapter comprising a hose connection by means of which a cleaning tool may be attached to the same and means providing a passage from the inlet of said nozzle structure to said hose connection, means pivoted to said adapter and operable automatically to engage a portion of said nozzle structure to latch said adapter to said nozzle structure when the latter is placed in operative position relative to said adapter, and a handle which is readily accessible to the operator and operatively associated with said latching means for moving said latching means to unlatch said adapter from said nozzle structure.

2,310,269

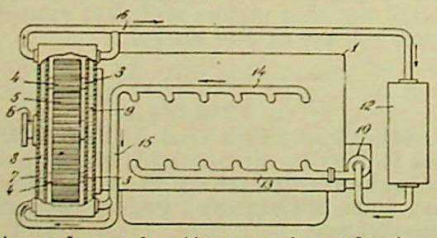
INTERNAL COMBUSTION ENGINE PLANT WITH AT LEAST TWO CRANKSHAFTS

Erwin Waeber, Winterthur, Switzerland, assignor to Sulzer Frères, Société Anonyme, Winterthur, Switzerland

Application December 27, 1941, Serial No. 424,643

In Switzerland August 16, 1941

5 Claims. (Cl. 123—170)



1. Internal combustion engine plant with at least two crankshafts driving a main shaft through a central gear characterised in that the gear member is provided with heating spaces connected to the cooling-circuit of the internal combustion engine, in order, by heating the gear member, to eliminate bending stresses in the transmission shafts which are supported partly in the gear member and partly in the internal combustion engine.

2,310,270

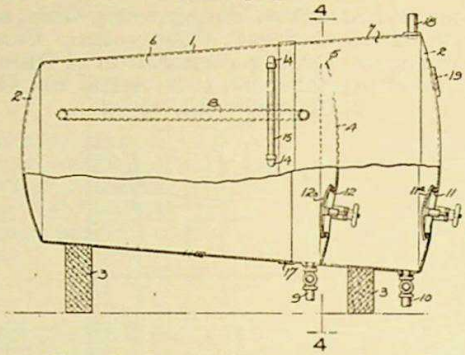
TANK

Herman Zerweck, Grosse Pointe, Mich.

Application February 24, 1941, Serial No. 380,261

8 Claims. (Cl. 195—134)

1. A vessel of the character described comprising a tank in the form of a horizontally disposed truncated cone having heads closing its extremities, a partition within the tank extending transversely adjacent its larger extremity, said partition being secured to the bottom and sides of the inner tank periphery whereby the tank is divided into two portions in communication with one another only between the top of the partition and the top part of the tank pe-



riphery, the tank portion extending from the smaller head being adapted to contain a fermenting liquid so that scum or yeast may flow towards the partition and be decanted thereover into the tank portion extending from the larger head, the tank periphery having an opening formed through the top thereof adjacent the larger head for the expulsion of air or gas, and separate outlet means provided in the two tank portions adjacent their lowest points.

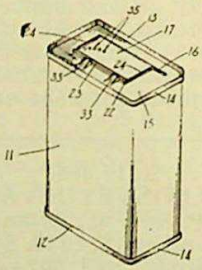
2,310,271

CONTAINER

George P. Ziehmer, Jr., New York, N. Y., assignor to American Can Company, New York, N. Y., a corporation of New Jersey

Application September 30, 1939, Serial No. 297,371

4 Claims. (Cl. 221—62)



1. A dredge top can comprising a top end having a dispensing area therein, and a flat perforated closure member having a sliding and hinging connection with the said top end, whereby said closure member when in one position against the can end covers the dispensing area and when slid to another position relative to said end registers its perforations with said area for a sifting dispensing action, and when hinged outwardly relative to said end exposes said area for a bulk dispensing action.

2,310,272

METHOD OF TREATING A PRODUCT PRODUCED FROM CELLULOSE DERIVATIVE MATERIAL

George Stuart Adlington, Putney Hill, London, England, assignor to Rayoid Manufacturing Company Limited, London, England

No Drawing. Application June 27, 1938, Serial No. 216,171. In Great Britain February 15, 1938

2 Claims. (Cl. 106—198)

1. The method of plasticizing a film of cellu-

lose ester especially adapted to be applied as a covering for aircraft propellers which comprises treating said film in a bath containing a chlorinated derivative selected from the group consisting of ethylene dichloride, dichlorethyl ether, and methyl chloride converted into a solvent for the cellulose ester by the addition of an aliphatic alcohol thereto and a non-solvent hydrocarbon selected from the group consisting of toluene, xylene, and petrol; the said bath also containing as a plasticizer ethylene glycol phthalate, to compensate for the loss of plasticizer removed from the cellulose ester film during treatment in the said bath.

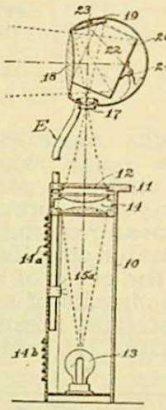
2,310,273

PROJECTOR

James E. Bancroft, Jamaica, N. Y., assignor to American Bowling and Billiard Corporation, New York, N. Y., a corporation of New York

Application June 18, 1941, Serial No. 398,517

7 Claims. (Cl. 88—24)



1. An optical projecting system for producing a true erect image on a screen of an object positioned in a plane at an angle to the screen, comprising a screen in front of an observer, an object support in front of said observed, a first lens component adapted to receive rays from an object on said support, a plane mirror adapted to receive the image forming rays from said first lens component, a 90° roof mirror positioned symmetrically to the axis of the system adapted to receive the image forming rays from said plane mirror, and a second lens component positioned with its axis at an angle to the axis of the said first lens so as to receive the image forming rays from said roof mirror and to cause them to converge on said screen so as to form an image thereon.

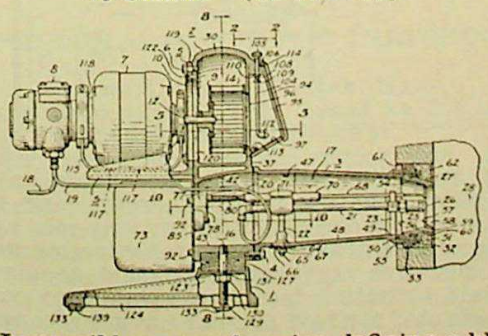
2,310,274

APPARATUS FOR BURNING LIQUID FUEL

Reginald W. Beckett, Elyria, Ohio

Application February 4, 1938, Serial No. 188,731

19 Claims. (Cl. 158—76)



1. In an oil burner, a housing defining a blower chamber having generally curved walls, a rotary blower in said chamber and means for actuating the same to rotate a mass of air in the chamber, an air tube associated with the housing and cooperatively defining therewith a substantially straight combustion air passage having an inlet end substantially in the plane of rotation of said air mass and an outlet spaced from the inlet in a direction parallel to the rotational axis of the blower, said inlet end having a cross sectional area materially less than the co-planar cross sectional area of the blower chamber, said housing including walls defining a passage to receive air tangentially from the rotating mass thereof in said chamber and to conduct the same tangentially into the inlet end of said combustion air passage to rotate in the latter in the same direction and in the same plane as in the blower chamber about an axis substantially parallel to the blower rotational axis whereby the conducted air is accelerated in the inlet end of the combustion air passage by the decrease in area while rotating in the same plane and in the same direction as the air in the blower housing, and means for supplying fuel oil in finely divided form to combustion air discharged from said outlet.

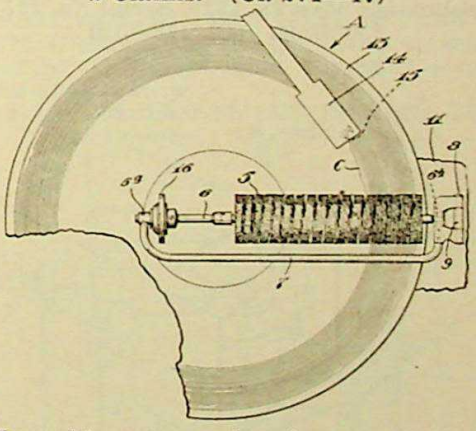
2,310,275

PHONOGRAPHIC CHIP REMOVER

Edgar A. Beebe, Los Angeles, Calif.

Application July 28, 1941, Serial No. 404,349

2 Claims. (Cl. 274—47)



1. In a chip remover for phonographic recording apparatus, a rotary brush, means for supporting said brush with the bristles on the lower side thereof lightly contacting the recording surface of a disk record at a point adjacent the recording stylus of the apparatus, and drive means associated with said brush and adapted to be operated by said apparatus for rotating the brush so that said bristles will sweep toward the stylus and thereby pick up from the record the chips cut by the stylus, including a shaft extending from the brush and a friction drive wheel carried by the shaft and adapted to contact the record, said shaft intersecting the center of the record; said brush and drive wheel lying in axial alignment on opposite sides of the center of the record.

2,310,276

SURFACE GAUGE CLAMP

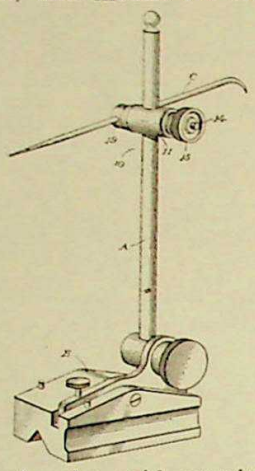
William F. Bilz, Coulters, Pa.

Application October 18, 1941, Serial No. 415,621

5 Claims. (Cl. 33—169)

1. A clamp for holding an index arm upon a spindle comprising a casing, sleeves slidably mounted within said casing, said sleeves and parts

of said casing having normally registering openings formed therein for receiving said spindle and said arm, and means for slidingly moving



said sleeves whereby said openings are moved slightly out of registry causing gripping of the spindle and index arm.

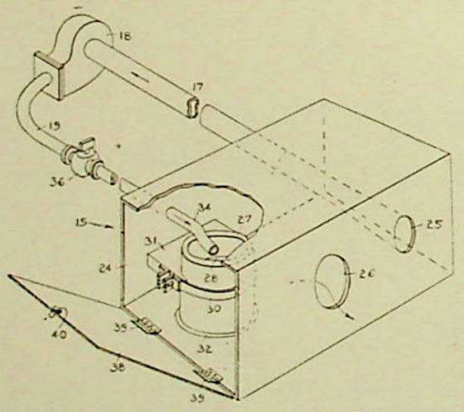
2,310,277

OXYGEN ENRICHMENT

Jesse G. M. Bullowa, New York, and Herman D. Ratish, Brooklyn, N. Y.

Application May 23, 1939, Serial No. 275,210

2 Claims. (Cl. 128—191)



1. A recirculating oxygen enrichment system including a housing with openings in its walls, and one of said openings of substantially larger area than the other, a heat-insulated jar for containing liquid oxygen, said jar having an open top located between said openings, and a blower with a suction conduit through which air is taken from the vicinity of the housing, a discharge conduit through which air is blown into the container through the smaller of said openings, and means at the end of said discharge conduit for deflecting the air to cause said air to pass across the surface of the liquid oxygen in said jar.

2,310,278

HYDROGENATING WITH CATALYST

Gerald C. Connolly, Baton Rouge, La., assignor to Standard Catalytic Company, a corporation of Delaware

No Drawing. Application May 20, 1938, Serial No. 209,147

5 Claims. (Cl. 196—53)

1. The process for the destructive hydrogenation of hydrocarbon oils which comprises passing a mixture of said oil and hydrogen containing gas through a hydrogenating zone maintained under destructive hydrogenating conditions of temperature, pressure and relative proportions of hydrogen and oil and contacting said oil and hydrogen while within said zone with a catalyst comprising a carrier composed of silica and alumina formed by impregnating silica hydrogel with a compound of aluminum convertible to the oxide and thereafter converting said aluminum compound to the oxide, said carrier so formed being impregnated with an active hydrogenating catalyst and maintaining said oil and hydrogen within said zone for a period sufficient to destructively hydrogenate said oil.

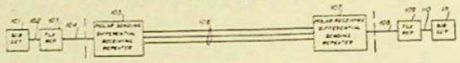
2,310,279

TELEGRAPH SYSTEM

Carl A. Dahlbom, Brooklyn, and Richard B. Hearn, Hollis, N. Y., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York

Application June 6, 1941, Serial No. 396,818

13 Claims. (Cl. 178—2)



1. In a telegraph transmission system, the combination of a polar sending-differential-receiving repeater circuit, a polar receiving-differential-sending repeater circuit, circuits interconnecting said repeater circuits, sending means at each of said repeater circuits for transmitting signal impulses to the other of said repeater circuits over separate circuits of said interconnecting circuits, and receiving means at each of said other repeater circuits for receiving said signal impulses.

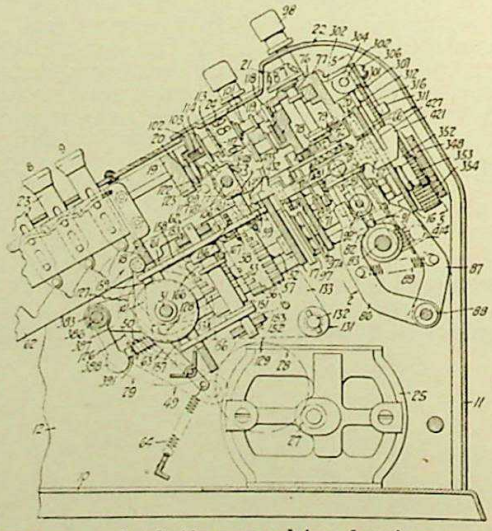
2,310,280

CALCULATING MACHINE

Carl M. F. Friden, Oakland, Calif., assignor to Friden Calculating Machine Co., Inc., a corporation of California

Application June 19, 1935, Serial No. 27,338

18 Claims. (Cl. 235—63)



15. In a calculating machine having an accumulator, actuating means therefor, and means including a cyclic clutch for driving said actuating means, shiftable means for effecting positive and negative registration on said accumulator by said actuating means, a revolutions counter, an actuator for said counter having a constantly operative drive connection with said clutch to re-

ceive an invariable cyclic movement therefrom, and means controlled by said shiftable means for rendering said actuator ineffective irrespective of continued movement thereof during operative driving movement of said clutch.

17. In a calculating machine having numeral wheels, cyclically operable actuating means therefor, and drive means for said actuating means including a cyclically operable clutch, means for effecting a machine operation including a manipulable control member, a drive connection between said actuating means and said effecting means, and means controlled by said control member for simultaneously enabling said clutch and said drive connection to impart a drive to said effecting means by operation of said actuating means with said actuating means ineffective to enter values in said numeral wheels.

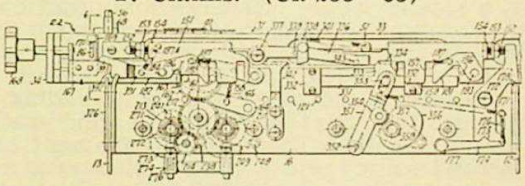
2,310,281

CALCULATING MACHINE

Carl M. F. Friden, Oakland, Calif., assignor to Friden Calculating Machine Co., Inc., a corporation of California

Application September 26, 1935, Serial No. 42,268

17 Claims. (Cl. 235—63)



4. In a calculating machine, a shiftable register, actuating means for said register, drive means for said actuating means including a source of power and a cyclically operable clutch providing the only path of power flow from said source of power, means for shifting said register with respect to said actuating means having a normally disabled drive connection with said actuating means, means for resetting said register to zero registration having a normally disabled drive connection with said actuating means, and selective control means for said clutch and for said drive connections between said actuating means and said shifting and resetting means.

6. In a calculating machine, a frame, a register mounted for endwise shifting movement on said frame, a source of power, means driven from said source of power for shifting said register, a shift key on said frame for controlling said shifting means, means driven from said source of power for resetting said register to zero, and a resetting control key for said resetting means mounted on said frame adjacent said shift control key to provide for simultaneous manipulation thereof whereby to cause simultaneous operating of said resetting and shifting means.

2,310,282

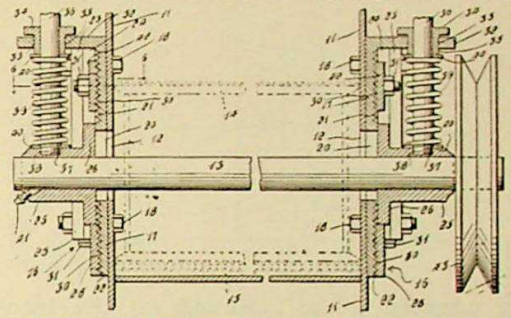
CYLINDER ADJUSTER FOR THRESHING MACHINES

Michael J. Gauss, Weskan, Kans.

Application April 24, 1941, Serial No. 390,180

4 Claims. (Cl. 308—33)

2. An attachment for supporting and yieldably mounting a threshing cylinder shaft, comprising a bracket adapted to be detachably fastened to the outer side of a side wall of a threshing machine and provided with an elongated upright opening adapted to register with a corresponding opening in said side wall, said bracket having a serrated portion beneath the opening, a plate mounted for adjustment vertically on the outer side of the lower part of the bracket and having a serrated face to mesh with said serrated portion for retaining the plate in adjusted position, a bearing disposed on the outer side of the bracket to journal a thresher cylinder shaft which extends through and is mounted to slide vertically in said opening, said bracket having channel portions form-



ing guides for slidably mounting the bearing for vertical movement, an adjustable abutment for the bearing at the upper end of the bracket, a part adjacent the upper end of the bracket overhanging said bearing and expansion spring means disposed between the said part and bearing for urging the bearing downwardly against said plate and for yieldably urging the shaft downwardly.

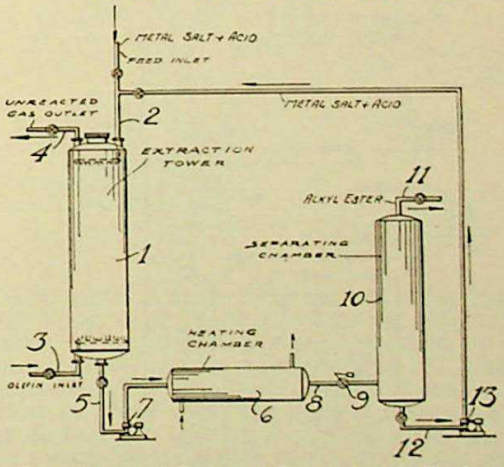
2,310,283

PREPARATION OF ALKYL ESTERS

Edwin R. Gilliland, Cambridge, Mass., assignor to Standard Oil Development Company, a corporation of Delaware

Application December 22, 1938, Serial No. 247,196

10 Claims. (Cl. 260—497)



4. A process of manufacturing alkyl esters, which comprises contacting a mixture of olefins and saturated hydrocarbons with cuprous halide and an acid at a temperature at which the olefins do not readily react with the acid, separating a mixture of the acid, the cuprous halide and the metal salt addition compounds from the mixture of unreacted olefins and saturated hydrocarbons and heating the separated mixture of acid, cuprous halide and cuprous halide addition compounds under pressure.

2,310,284

FRONT END LOADER

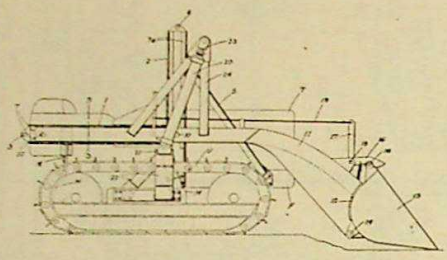
Albert G. Gurries, Gilroy, Calif.

Application November 19, 1940, Serial No. 366,222

9 Claims. (Cl. 214—140)

1. A front-end loader for a tractor, comprising

spaced side arms, a bucket carried by the arms at their forward end and a mounting and operating means for the side arms comprising, as a unit for each arm, a straight substantially vertical track and a straight substantially horizontal track extending rearwardly from the vertical track adjacent the lower end thereof, the units



being adapted to be mounted on the tractor; blocks slidable along the tracks, means pivotally mounting the vertical track blocks on the corresponding arm intermediate its ends, means pivotally mounting the horizontal track blocks on the corresponding arm adjacent its rear end, and means to apply a lifting pressure to the arms intermediate the ends thereof.

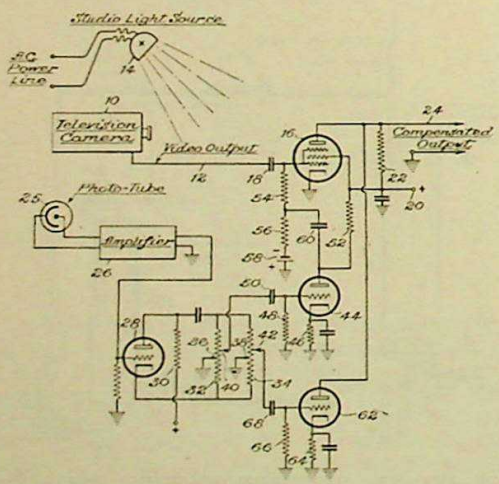
2,310,285

TELEVISION TRANSMITTING SYSTEM

Oscar B. Hanson, Westport, Conn., assignor to Radio Corporation of America, a corporation of Delaware

Application September 30, 1941, Serial No. 412,920

11 Claims. (Cl. 178—7.1)



1. A circuit arrangement for use in a television transmitter wherein artificial lighting is employed and wherein the source of artificial light is energized from an alternating current power line having a frequency different from the television field scanning frequency comprising a light responsive element for producing voltage variations in accordance with the fluctuations in the artificial lighting, a television camera for producing a series of video signals, means including an amplifier tube for amplifying the video signals, and means for altering the amplification factor of said video signal amplifying tube in accordance with the voltage variations derived from the light responsive element to compensate for cyclically recurrent changes in the intensity of the produced video signals.

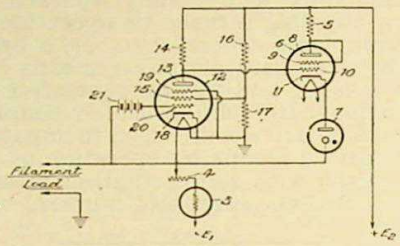
2,310,286

VOLTAGE REGULATING SYSTEM

Grant E. Hansell, Riverhead, N. Y., assignor to Radio Corporation of America, a corporation of Delaware

Application June 25, 1941, Serial No. 399,610

12 Claims. (Cl. 250—27)



11. In a system for supplying current to a filament of a vacuum tube, a first source of energy for supplying a major portion of current to said filament, a ballast resistor connected between said first source and said filament to maintain current from said first source at a constant value, a second source of energy for supplying a small portion of the current to said filament and means responsive to the voltage across said filament for controlling the current supplied by said second source, said means including a thermionic discharge tube having an anode-cathode circuit in series between said filament and said second source and a control electrode, and means responsive to said filament voltage for applying a variable potential to said control electrode.

12. In a system for supplying current to a filament of a vacuum tube, a first source of energy for supplying a major portion of current to said filament, a ballast resistor connected between said first source and said filament to maintain current from said first source at a constant value, a second source of energy for supplying a small portion of the current to said filament and means responsive to the voltage across said filament for controlling the current supplied by said second source.

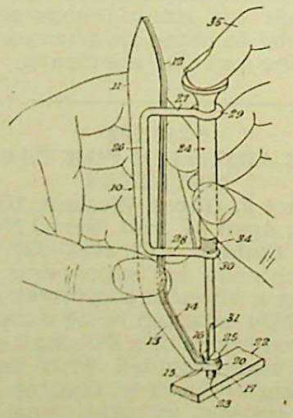
2,310,287

COMBINED HOLDER FOR SCREWS AND SCREW DRIVERS

Charles Hausbeck, New York, N. Y.

Application December 5, 1940, Serial No. 368,556

1 Claim. (Cl. 145—52)



An implement comprising tweezers, and means

fixed to and laterally extending from said tweezers for guiding a tool in the direction of the work-holding end of said tweezers for actuating the work held by said end, said tweezers being provided with cooperable lateral arcuate tapered surfaces at said work holding end, forming a guide for the said work and spreadable by actuation of said tool upon said work, the ends of said legs being arced inwardly to facilitate engagement of said work and positioning said work between said tapered surfaces.

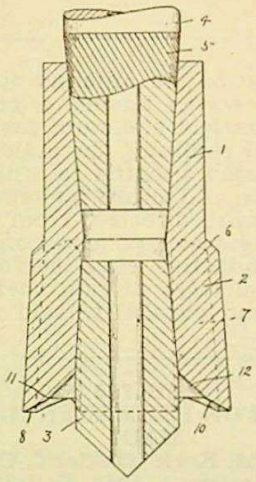
2,310,288

DRILL BIT

Martin Hokanson, Duluth, Minn., assignor to Eidco, Incorporated, Duluth, Minn., a corporation of Minnesota

Application July 17, 1939, Serial No. 284,939

3 Claims. (Cl. 255—64)



1. In a detachable two-piece drill bit, the combination of a hollow body portion having a cylindrical shank at one end and an outwardly flaring enlarged portion at the other end, said enlarged portion having a plurality of longitudinal passages symmetrically disposed about the circumference of said enlarged portion; an axial socket within said enlarged portion; a depression within the lower end of said enlarged portion extending from the base of said socket to the lower outer end of said enlarged portion forming a plurality of arcuate reaming edges; and a central pilot cutter consisting of a shank at one end for removable installation within said socket and a substantially cylindrical portion at its other end extending through said depression and beyond the plane of said reaming edges, and terminating in a straight cutting edge at right angles to the axis of said drill bit.

2,310,289

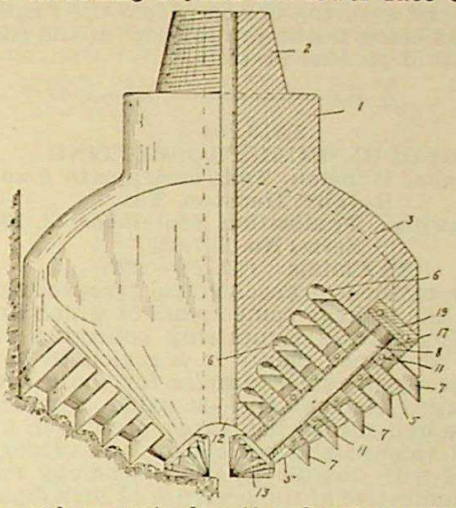
DRILL BIT

Martin Hokanson, Duluth, Minn., assignor to Eidco, Incorporated, Duluth, Minn., a corporation of Minnesota

Application October 23, 1939, Serial No. 300,794

11 Claims. (Cl. 255—71)

1. In a rotary drill of the type described, a head portion having flattened sides and being downwardly and inwardly inclined, a plurality of spaced openings in said inclined sides, a plurality of downwardly and inwardly inclined shafts mounted within said head and traversing said openings, a plurality of disc-like cutters carried upon each shaft, each cutter being installed within an opening, and a portion of each cutter extending beyond the lower face of said



head, and a central cutter head carried upon the lowermost end of each of said shafts.

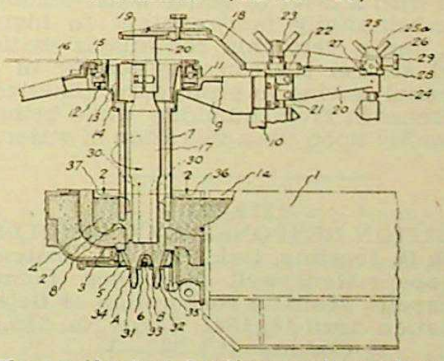
2,310,290

METHOD OF FEEDING MOLTEN GLASS IN PLURAL CHARGES

William T. Honiss, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a corporation of Delaware

Application August 9, 1940, Serial No. 351,936

7 Claims. (Cl. 49—77)



1. The method of feeding molten glass from a supply body in a feeding container through a plurality of adjacent discharge orifices in the bottom of a well that is submerged by the glass in the container, comprising the steps of controlling the flow of glass from the supply body into the upper end of the well by disposing an open bottomed rotary vertical tube in the container above the well with the open lower end of said tube depending into the supply body to a predetermined distance above the upper end of the well, controlling the discharge of glass from the well through said orifices by reciprocating a plunger verticaly in the glass above said orifices with the lower end portion of the plunger depending through said tube in spaced relation therewith, regulating the relative weights of glass discharging from said orifices and accumulating in suspension below said orifices during each of successive predetermined periods of time by rotating the tube and regulating the radial distances between angularly different lateral surfaces of the plunger and the surrounding, rotating tube to regulate the relative heads of glass in the different portions of the tube above the respective discharge orifices to compensate for differences of temperature between the different portions of

glass respectively passing from the supply body downwardly in the well toward the respective orifices, and severing charges from the suspended masses below the several orifices at the end of each of said periods of time.

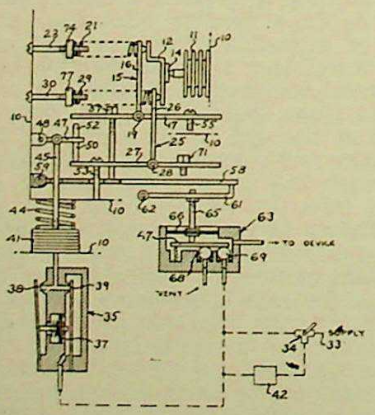
2,310,291
GEOCHEMICAL PROSPECTING
Leo Horvitz, Houston, Tex., assignor to Esme E. Rosaire, Houston, Tex.
No Drawing. Application September 23, 1940, Serial No. 357,923
14 Claims. (Cl. 23—230)

1. The method of geochemical prospecting for deposits the leakage components of which are of a reducing nature comprising collecting earth samples at spaced points in a region to be explored, analyzing such samples for those ions of a polyvalent element the -ic oxide of which is reducible by hydrocarbon gases, present in lower states of valence and correlating the values determined with sample locations whereby information indicative of the presence of such deposits is obtained.

2,310,292
GUMMED BODY
Ferdinand W. Humphner, Oak Park, Ill., assignor to Mid-States Gummed Paper Co., Chicago, Ill., a corporation of Delaware
No Drawing. Application August 5, 1940, Serial No. 351,550
5 Claims. (Cl. 117—76)

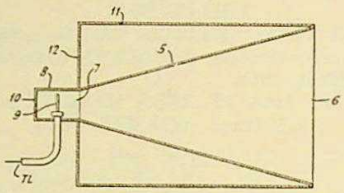
2. A gummed body having a surface thereof provided with a layer of active water-soluble adhesive substantially non-resistant to high humidities, and a very thin continuous coating of polyvinyl alcohol thereon, the coating of polyvinyl alcohol serving to protect the adhesive layer therebeneath from humidity while being dissolved readily upon the application of water.

2,310,293
CONDITION RESPONSIVE CONTROLLER
Frederick D. Joesting, Oak Park, Ill., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a corporation of Delaware
Application April 18, 1941, Serial No. 389,188
10 Claims. (Cl. 236—1)



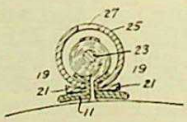
3. In a pneumatic control instrument, in combination, control valve means for determining the pressure in a control line, a primary lever adapted to actuate said valve means, a pair of secondary levers each of which is adapted to position said primary lever, an operating lever pivoted to each of said secondary levers, a condition responsive element for positioning a point on said operating lever intermediate its points of connection to said secondary levers, and means for rendering either of said secondary levers effective selectively to transmit force produced by said element to said valve means.

2,310,294
ELECTROMAGNETIC HORN ANTENNA
Martin Katzin, Riverhead, N. Y., assignor to Radio Corporation of America, a corporation of Delaware
Application March 1, 1941, Serial No. 381,264
10 Claims. (Cl. 250—11)



1. In combination, an antenna operative with radiant energy waves having a predetermined plane of polarization, structure associated with said antenna for confining the major part of the radiation from said antenna to a predetermined forward direction and means for preventing radiation in a rearward direction from experiencing a shift in the plane of polarization including a rectangular conductive shell surrounding said structure, the surfaces of said shell being perpendicular to and parallel to said plane of polarization.

2,310,295
EQUIPMENT FOR PERMANENTLY WAVING HAIR
Ralph M. Keele, Oakland, Calif.
Application January 5, 1942, Serial No. 425,633
5 Claims. (Cl. 132—36)

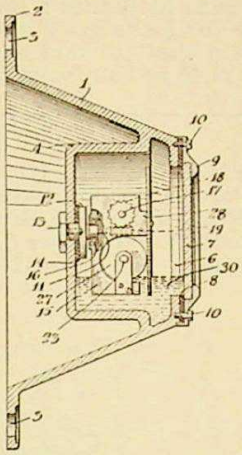


1. In an apparatus of the character described, a jacket comprising a hollow shell divided transversely into two sections, complemental means at the adjacent ends of said sections for detachably connecting the same, and a curler rod disposed centrally and longitudinally within the jacket and having ends adapted to be received in and be supported by the ends of said jacket.

2,310,296
REGISTER MECHANISM
Paul Knopf, New York, N. Y.
Application October 19, 1939, Serial No. 300,116
1 Claim. (Cl. 235—95)

A register device adapted to be mounted on a rotatable element for visibly indicating the number of rotations thereof comprising a casing having a window mounted therein forming a substantially liquid proof enclosed chamber, a drive shaft disposed within the chamber and fixed on the casing, a register mechanism mounted rotatably on the drive shaft with its center of gravity below the shaft, indicator wheels mounted on said register mechanism and adapted to be viewed through the window in said casing, means including a worm mounted on the shaft for driving the indicator wheels upon relative rotation of the

mechanism and the drive shaft, and an unctuous liquid present in said chamber in an amount just



sufficient to cover the lower portion of the register mechanism when the device is at rest.

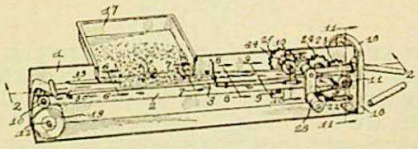
2,310,297

CIGARETTE MAKING MACHINE

Samuel Krasnow and William Edelberg, Montreal, Quebec, Canada; said Edelberg assignor to said Krasnow

Application October 23, 1940, Serial No. 362,432

1 Claim. (Cl. 131—65)



In a cigarette machine the combination of a vertical wall, an endless belt mounted on pins in the wall, a trough supporting the upper layer of the belt, a feed portion of the trough open above, a horizontal tray mounted on the wall, its edge overlapping one edge of the trough, a forming portion of the trough having an arched cover secured to the sides of the trough, an arched insert secured to one end of the cover and spaced apart therefrom, a burr wheel journalled in the narrowed far end of the insert, a crimping wheel bearing on the burr wheel through a slot in the cover, gear wheels journalled on pins in the wall adapted to rotate the crimping wheel and drive the belt, a hand crank meshing with the gear wheels, means for supporting a roll of paper mounted to feed a strip of paper on the belt, and means for cutting said paper periodically, the insert having an upward bend towards the burr wheel end adapted to provide spring tension to the burr wheel against the crimping wheel.

2,310,298

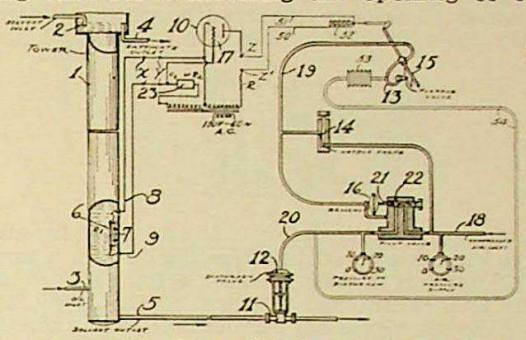
LIQUID LEVEL CONTROL DEVICE

Paul E. Kuhl, Madison, and Francis R. Russell, Elizabeth, N. J., assignors to Standard Oil Development Company, a corporation of Delaware

Application July 28, 1938, Serial No. 221,862

3 Claims. (Cl. 137—68)

1. Apparatus for maintaining in a countercurrent treating system the level of the interface between two substantially immiscible liquid having dissimilar electrical resistivities, comprising vertically disposed electrical plate contacts closely spaced to each other, means for applying an electrical potential to said contacts so that a change in the interface level will cause a variation in the continuous current between the contacts, means for transmitting this variation to the anode current of a gas-filled grid-controlled rectifying tube, means associated with said rectifying tube for controlling the opening or clos-



ing movement of a valve in response to variations in the intensity of the continuous current flowing between said contacts whereby to regulate the relative volumes of the two liquids in the system.

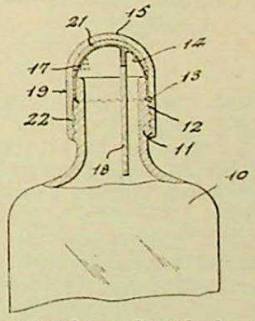
2,310,299

BOTTLE CAP AND CLOSURE

Bernard P. Lasky, Beverly Hills, Calif.

Application October 3, 1941, Serial No. 413,509

1 Claim. (Cl. 215—79)



A dispensing cap for a bottle having a threaded neck and a groove above the uppermost thread, said cap having a semi-spherical upper end and a depending skirt portion adapted to snugly fit the bottle neck, the skirt being permanently secured at its lower end within the groove, said cap further having a plurality of apertures formed in a side thereof, a vent tube on the cap of a length to be extended into a bottle neck, a closure cap threadedly engaged with the threads of the bottle neck and having a shape corresponding to the first cap, and a similarly shaped cork in the closure cap constructed and adapted to overlie the apertures of the first cap when the closure cap is fully engaged upon a bottle neck, but of a depth stopping short of the lower edge of the skirt portion a substantial distance.

2,310,300

REGISTER MECHANISM FOR INDICATING INSTRUMENTS

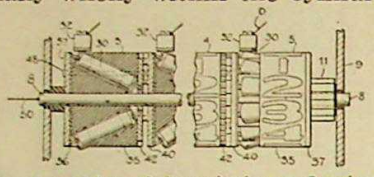
Ward Leathers, Brooklyn, N. Y., assignor, by mesne assignments, to International Business Machines Corporation

Application August 2, 1940, Serial No. 349,976

4 Claims. (Cl. 201—48)

1. A cyclometer wheel for registering meters comprising a substantially solid rotatable cylindrical body formed of insulating material and having a plurality of value-representing indicia on the outer cylindrical surface thereof, a plu-

rality of resistors corresponding in number to the number of said indicia and having different electrical resistance values which are correlated with the values represented by said indicia, said resistors being embedded in the body in spaced relationship with respect to each other and contained substantially wholly within the cylindrical con-



fines thereof, said resistors being adapted for successive introduction into a reading circuit, a small limited portion of each resistor being exposed adjacent the cylindrical surface of the body and accessible for electrical connection in the circuit, said exposed portions occupying positions at the cylindrical surface in a common plane normal to the longitudinal axis of the body.

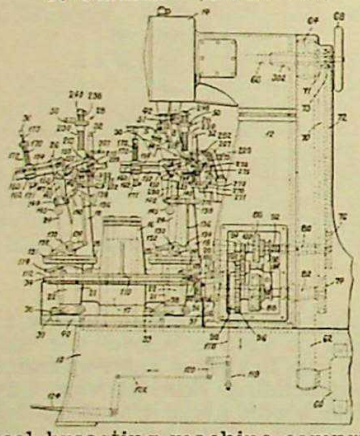
2,310,301

HEEL-BREASTING MACHINE

Bernard T. Leveque, Wenham, Mass., assignor to United Shoe Machinery Corporation, Flemington, N. J., a corporation of New Jersey

Application April 16, 1941, Serial No. 388,783

47 Claims. (Cl. 12—47)



1. A heel-breasting machine comprising a reciprocating tool arranged to cut heightwise of an attached heel, and means for supporting and moving a shoe to feed its heel past the tool, while the tool is operating, progressively to breast the heel from side to side.

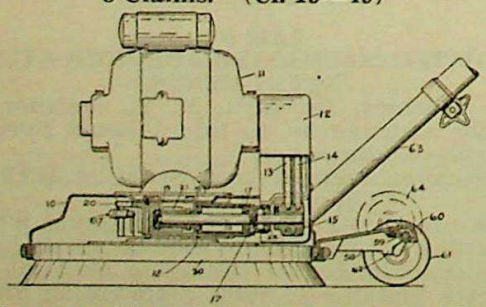
2,310,302

FLOOR TREATING MACHINE

Russell K. Lewis, Elkhart, Ind., assignor to Finnell System, Inc., a corporation of Indiana

Application March 6, 1941, Serial No. 382,013

8 Claims. (Cl. 15—49)



1. In a machine of the class described, having a driving shaft and a brush member driven thereby, a yieldable coupling between said shaft and member, and means including a locking member in said coupling for locking the parts thereof to rigidly couple said shaft to said member thereby eliminating the yield in said coupling.

2,310,303

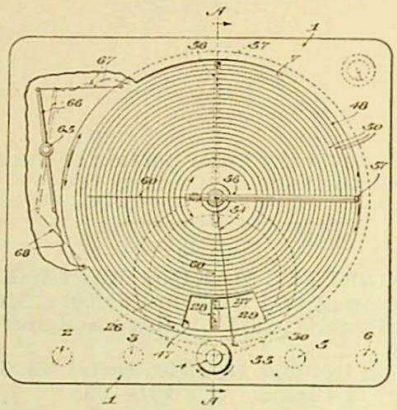
TUNING DEVICE FOR RADIO RECEIVERS

Ramon Masllorens, Buenos Aires, Argentina

Application September 22, 1941, Serial No. 411,899

In Argentina September 6, 1941

4 Claims. (Cl. 116—124.1)



1. In a tuning unit for radio receivers, a tuning element comprising a rotatable control shaft, manually actuatable means for rotating said control shaft, an indicating shaft, means for rotatably driving said indicating shaft by said control shaft, a register plate positioned on said indicating shaft and carrying a spiral centered about said indicating shaft and with equally spaced turns along which wave length indicia are positioned, a guide sleeve member fixedly carried by said indicating shaft substantially perpendicular thereto and positioned to pass over said register plate, a pointer member carried in said guide sleeve member longitudinally slidable therein, and for movement over said register plate, and means actuatable by rotation of said guide sleeve member about the axis of said indicating shaft for progressively varying the longitudinal position of said pointer member in said guide sleeve member radially with reference to said indicating shaft, said means being adapted to displace said pointer member radially of said spiral on said register plate a distance equal to the space between two successive turns of said spiral for every complete rotation of said pointer member.

2,310,304

FREQUENCY MODULATION RADIO RECEIVER

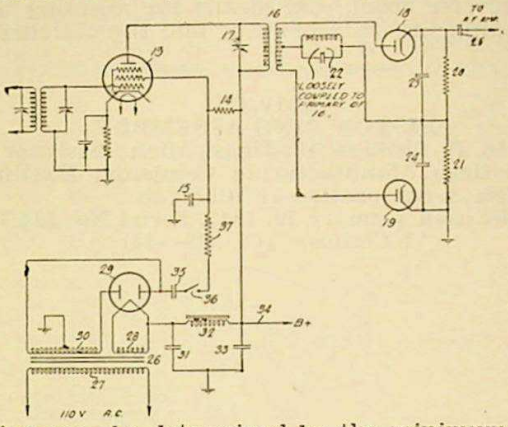
Claudius T. McCoy, Philadelphia, and Palmer M. Craig, Cheltenham, Pa., assignors to Philco Radio and Television Corporation, Philadelphia, Pa., a corporation of Delaware

Application October 21, 1941, Serial No. 415,966

12 Claims. (Cl. 250—20)

9. In a radio receiver adapted to receive frequency-modulated signals, a detector which is substantially unaffected by amplitude modulation on an incoming signal when the receiver is properly tuned to an incoming signal frequency, means for amplitude-modulating the incoming signal with an audible tone, and means for ob-

serving the effect of said amplitude modulation on said detector, whereby the point of proper



tuning may be determined by the minimum reproduction of said tone.

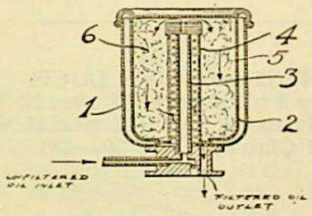
2,310,305

METHOD AND MEANS FOR PURIFYING LUBRICANTS

Pharis Miller, Elizabeth, and Eugene Lieber, Linden, N. J., assignors to Standard Oil Development Company, a corporation of Delaware

Application December 31, 1937, Serial No. 182,648

17 Claims. (Cl. 252—10)



1. A method for maintaining and improving the quality of a lubricating oil during service comprising circulating at least a portion of said oil through an addition agent reservoir containing a supply of slightly oil-soluble improving agent in undissolved form having oxidation inhibiting properties, whereby said oil contacts at least a portion of said improving agent and dissolves a small amount thereof, and recirculating said treated oil into service.

9. An article of manufacture for insertion into a lubricating oil system for improving and maintaining the quality of lubricating oils during service which comprises a container provided with an inlet and an outlet for oil and containing between said inlet and outlet a supply of slightly oil-soluble improving agent in undissolved form which will dissolve sufficiently in the oil during service to inhibit decomposition thereof.

2,310,306

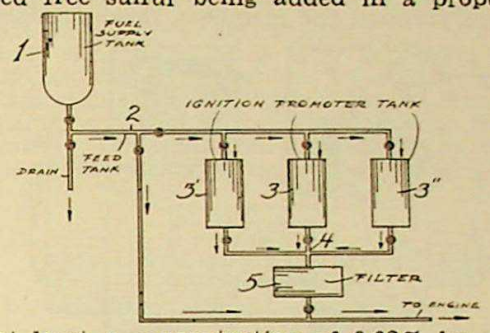
METHOD OF TREATING DIESEL FUELS

Pharis Miller, Elizabeth, N. J., and Eugene Lieber, West New Brighton, Staten Island, N. Y., assignors to Standard Oil Development Company, a corporation of Delaware

Application October 10, 1939, Serial No. 298,804

5 Claims. (Cl. 44—57)

1. The method of treating a Diesel hydrocarbon fuel prior to ignition of the fuel in a compression-ignition engine of the Diesel type, which comprises contacting a substantial portion of said fuel with solid free sulfur under suitable conditions and for a sufficient time to homogeneously admix with the fuel a substantial ignition quality improving amount of free sulfur, the admixed free sulfur being added in a proportion



of at least a concentration of 0.02% by weight of the fuel just prior to the injection of the fuel into the combustion zone.

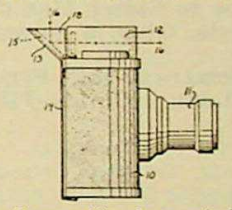
2,310,307

VIEW FINDER REFLECTOR FOR CAMERAS

Kenneth W. Montgomery, Des Moines, Iowa

Application May 17, 1940, Serial No. 335,755

1 Claim. (Cl. 88—1.5)



In a view finding attachment for cameras, an elongated base member, spring clip member formed on each end of said base member for yieldingly securing said base member to the back portion of a camera or like, an angular portion formed on one end of said base member, extending beyond one of said spring clips and having a side shield thereon, a reflecting surface on the inner side of said angular portion; said base portion, said clips, said angular members and said shields being formed of a single sheet of material, and a means formed on said angular portion for holding said reflecting surface on said angular portion.

2,310,308

ALLOY

Raymond L. Morrison, Buffalo, N. Y., assignor to Morrison Railway Supply Corporation, Buffalo, N. Y., a corporation of New York

No Drawing. Application April 25, 1940, Serial No. 331,675

2 Claims. (Cl. 219—8)

1. A welding rod for welding manganese steel comprising manganese from 5 to 20%, copper from 1 to 5%, carbon from 0.1 to 2%, silicon from 0.1 to 2% and the balance essentially iron.

2,310,309

FLUID CONTROL DEVICE

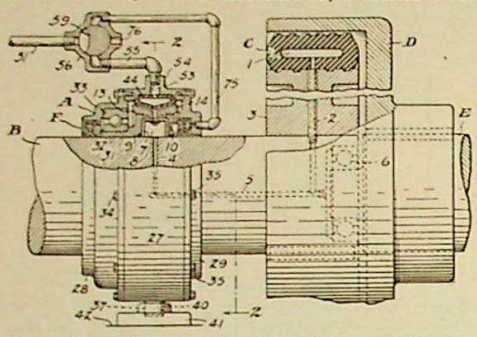
Glenn H. Orr, Akron, Ohio, assignor to The General Tire & Rubber Company, Akron, Ohio, a corporation of Ohio

Application May 17, 1939, Serial No. 274,238

22 Claims. (Cl. 137—69)

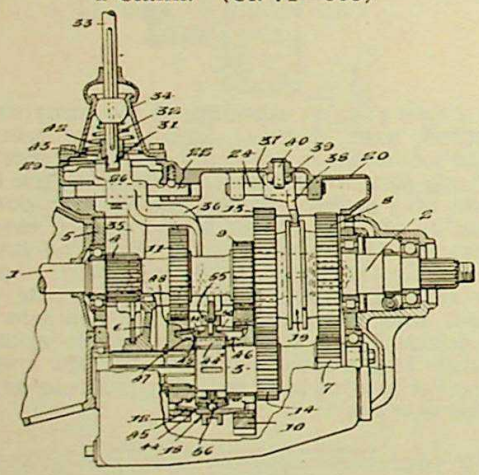
1. A rotary fluid controlling device and seal for a shaft comprising an annular member rotatably mounted on the shaft but normally rotatable therewith, a relatively stationary member mounted adjacent the annular member and movable toward the annular member to friction-

ally engage the same and arrest rotational movement of the annular member, interconnecting passages through the members, means connect-



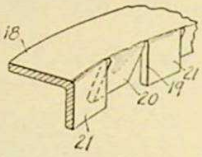
ing one of said passages with the shaft, and means connecting one of the passages with a fluid conduit.

2,310,310
TRANSMISSION GEARING
Carl D. Peterson and Elmer J. Barth, Toledo, Ohio, assignors to Spicer Manufacturing Corporation, Toledo, Ohio, a corporation of Virginia
Application February 8, 1940, Serial No. 317,906
1 Claim. (Cl. 74—333)



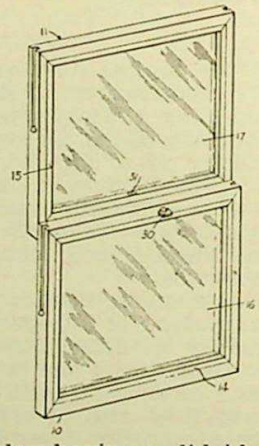
In a change speed transmission gearing, an input shaft, an output shaft alined therewith, and a countershaft, a gear mounted on and rotatable with the input shaft, second and third gears mounted on and rotatable with the input shaft, gears on the countershaft and rotatable about the same and clutchable thereto and meshing with the second and third gears on the input shaft respectively, a fourth gear loosely mounted on the input shaft and clutchable thereto, and meshing with a gear mounted on and rotatable with the countershaft, a final drive gear mounted on the output shaft and rotatable therewith and meshing with a gear rotatable with the countershaft, a clutch operable in opposite directions from neutral to alternately clutch the gears loosely mounted on the countershaft to the countershaft, a second clutch shiftable in opposite directions from neutral to alternately clutch the gear loosely mounted on the input shaft to the input shaft, and to clutch the input and output shafts directly together, an idler spool having one of its gears meshing with the first gear on the input shaft, a gear rotatable with the countershaft and normally out of mesh with the other gear of the spool and the first gear on the input shaft and shiftable in opposite directions from neutral to mesh with the first gear on the input shaft and the other gear of the reverse spool, and means for selecting and operating the shiftable gear and the clutches.

2,310,311
PISTON RING ASSEMBLY
Harold P. Phillips, Hastings, Mich., assignor to Hastings Manufacturing Company, Hastings, Mich., a corporation of Michigan
Application January 20, 1940, Serial No. 314,745
7 Claims. (Cl. 309—44)



7. A spacer of the type described, comprising an annular split member of thin ductile strip metal having an annular radially extending cylinder wall engaging flange, and axial spacing means integrally connected to said flange, including axial spacing portions and tongues extending radially relative to said portions and terminating in radially spaced relation thereto, said portions and tongues having substantially coplanar exposed edges at one axial side thereof adapted for engagement with an adjacent surface.

2,310,312
WINDOW SASH LOCK
Henry Philipsberg, Bronx, N. Y.
Application January 22, 1942, Serial No. 427,735
2 Claims. (Cl. 20—48)

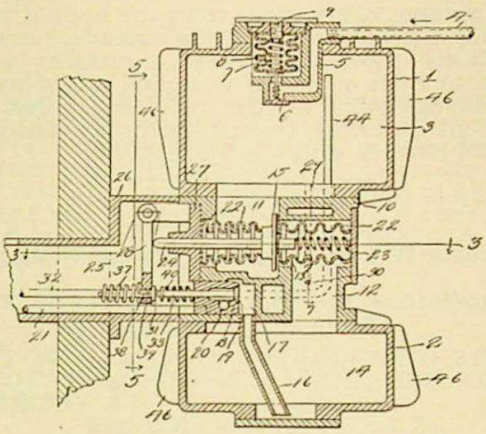


1. In a window having a slidable sash frame, a sash pivoted at its top and bottom rail in said frame, at least one of said sash pivots being rigidly secured in its rail and having a rectangular socket in its outer end, a casing having a stem rotatably mounted therein, said stem being engageable in said socket, a spur pinion fixed on said stem, a worm movable to engage said pinion, and manual means to move said worm relative to said pinion.

2,310,313
DISPENSING DEVICE FOR BEVERAGES
Oliver Pivert, New Orleans, La.
Application November 1, 1941, Serial No. 417,550
10 Claims. (Cl. 225—6)

1. A beverage dispensing device comprising a casing having a high pressure beverage chamber, a casing having a low pressure beverage cham-

ber, a normally open valve disposed in a passage of communication between the high pressure chamber and the low pressure chamber, spring means for maintaining said normally open valve open, a normally closed discharge valve through which the beverage in the low pressure chamber



is discharged, operating means cooperating with said normally open valve whereby the normally open valve is closed upon starting of a dispensing operation and the dispensing valve is opened and means for supplying reduced pressure into the low pressure chamber during the dispensing operation.

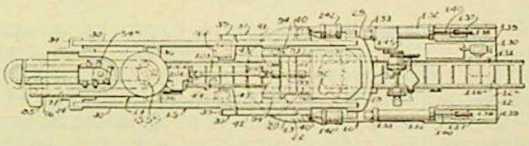
2,310,314

KERF-CUTTING MINING MACHINE

Thomas E. Pray, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a corporation of Illinois

Application July 12, 1941, Serial No. 402,052

16 Claims. (Cl. 262—29)



1. In a mining machine, a base, a cutter head including a frame having a cuttings discharge passageway extending longitudinally therethrough, a chain-carrying cutter bar mounted on said frame with its cutter chain arranged to carry the cuttings along said passageway, parallel link means for supporting said cutter head in extended relation in advance of said base and for adjusting said head in a plurality of horizontal cutting planes, conveyer means on said base for carrying the cuttings rearwardly therealong, and an intermediate elevating conveyer having its front end rockably connected to said cutter head independently of said parallel link means for receiving the cuttings from said passageway and conducting them to said first named conveyer in all positions of said cutter head.

2,310,315

SODIUM SULPHATE FLOTATION

David J. Pye, Walnut Creek, Calif., assignor to The Dow Chemical Company, Midland, Mich., a corporation of Michigan

No Drawing. Application October 7, 1940, Serial No. 360,116

5 Claims. (Cl. 209—166)

1. A process for separating sodium chloride crystals from sodium sulphate crystals which comprises subjecting a pulp of said crystals in an alkaline brine containing sodium hydroxide to a froth flotation process employing an agent selected from the group consisting of a fatty acid, a fatty acid soap and a fatty acid ester and a material supplying an ion selected from the groups consisting of calcium, barium, strontium, titanium and iron in the ferric state to float off selectively the sodium sulphate crystals from the sodium chloride crystals.

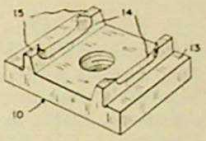
2,310,316

CLINCH-ON NUT AND METHOD OF MANUFACTURE

Harold G. Renner, Detroit, Mich.

Application July 16, 1940, Serial No. 345,815

3 Claims. (Cl. 10—86)



1. The method of manufacturing clinch-on nuts and the like which comprises providing a blank with a raised section of substantial area, restricting the outward and downward flow of the metal of the blank, and striking said raised section with a punch member whose effective area is less than the area of said section, whereby the portions of said section which are not covered by said punch member are caused to flow upwardly to form securing tongues.

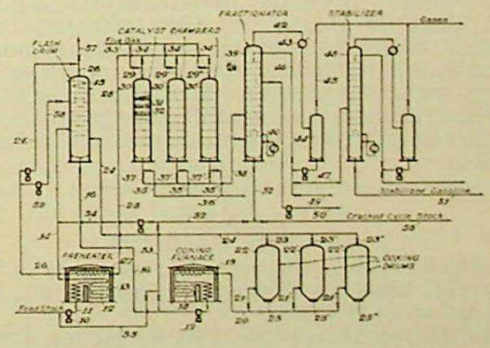
2,310,317

COMBINATION COKING AND CATALYTIC CRACKING PROCESS

Joseph K. Roberts, Flossmoor, Ill., assignor to Standard Oil Company, Chicago, Ill., a corporation of Indiana

Application May 27, 1938, Serial No. 210,316

11 Claims. (Cl. 196—49)

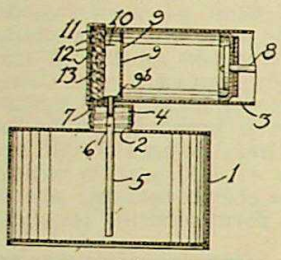


4. The method of converting heavy hydrocarbons into high quality motor fuel, which comprises introducing said hydrocarbons into a flash zone, continuously withdrawing hydrocarbons heavier than light gas oil from the base of said flash zone, increasing the pressure on the withdrawn hydrocarbons and introducing them into a coking drum at a temperature of about 900 to 950° F. whereby said hydrocarbons undergo decomposition to form coke, gases and vapors introducing the gas and vapors produced by the coking process into said flash zone for admixture with incoming fresh feed, withdrawing light gas oil, naphtha and gases from the upper part of said flash zone and catalytically cracking said light gas oil to produce high quality motor fuel of high octane number.

2,310,318
GEOCHEMICAL PROSPECTING
Esme E. Rosaire, Houston, Tex.
No Drawing. Application July 20, 1940, Serial No. 346,520
3 Claims. (Cl. 23—230)

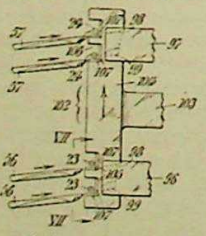
1. In geochemical prospecting in which samples of soil are collected for the purpose of recovering therefrom a gas to be analyzed for significant constituents the step of subjecting the soil samples immediately upon recovery to such substantially reduced temperature that such constituents as are otherwise subject to loss at ordinary temperatures are retained in the samples and holding the samples at this reduced temperature until they are subjected to a treatment for the recovery therefrom of the gas to be analyzed.

2,310,319
LIQUID SPRAYER
William H. Rose, Jersey City, N. J., assignor to Stanco Incorporated
Application June 21, 1940, Serial No. 341,686
12 Claims. (Cl. 299—89)



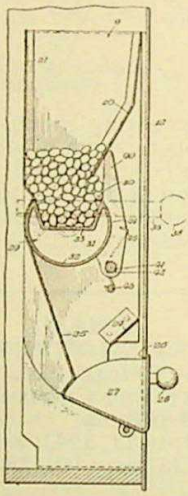
6. A sprayer, comprising a spray pump barrel having a discharge end, means carried by the barrel adjacent the discharge end to engage a reservoir for liquid, a ported discharge end closure for said barrel and a perforate, lateral partition disposed within the barrel in spaced relation to said closure member, a conduit carried by the spray barrel, opening thereinto, forward of the partition and extending downward through the reservoir engaging means, and a liquid-absorbent, fluid-dispersing filler element in said barrel, interposed between the discharge port and said conduit, said filler element adapted to divert a portion of the pressure air deliverable through said barrel into the conduit tube, and receiving liquid therethrough from a reservoir, when attached.

2,310,320
SEWING MACHINE
Charles F. Rubel, Chicago, Ill., assignor to Union Special Machine Company, Chicago, Ill., a corporation of Illinois
Application March 26, 1940, Serial No. 325,969
6 Claims. (Cl. 112—227)



1. A sewing machine comprising a plurality of needles which are spaced laterally of the direction of feeding; respectively associated thread-carrying loopers; means for imparting back and forth needle loop engaging movements to the loopers in the direction of feeding; spreaders confined to back and forth movement en masse crosswise of the direction of feeding to laterally draw the threads of the respective loopers into loops for entry of the associated needles; a needle guard common to the needles and connected for movement in unison with the spreaders and having notches open in the direction of feeding, said notches being wider than the needles to allow for the movement of the spreaders and respectively providing camming surfaces at an angle to each other for engaging and directing the corresponding needles in the event that they are bent or flexed, to insure proper cooperation of said needles with the loopers.

2,310,321
VENDING MACHINE
Edgar H. Sargent and Anastasius G. Alex, Evanston, Ill.
Application July 14, 1941, Serial No. 402,284
4 Claims. (Cl. 221—106)

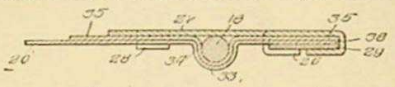


1. In a vending machine comprising an upstanding discharge chute and an open bottom hopper for the articles to be vended positioned above and in spaced relation with the upper end of the discharge chute, the combination of a horizontally disposed drum embodying a substantially cylindrical side wall with a pocket therein and mounted rotatably between the hopper and the chute to turn from a charging position wherein the pocket faces upwards and receives a batch of articles from the hopper to a discharging position wherein the pocket faces downwards and the batch drops into the chute and then back again, and a series of side by side upstanding laterally yieldable fingers positioned along one side of the drum and so that the pocket moves therepast during turning of the drum from its charging position to its discharging position, having the upper extremities thereof arranged to abut against a portion of the hopper and limit movement of the fingers towards the drum, and adapted during turning of the drum from its charging position to its said discharging position to be individually urged away from the drum by any protruding articles along the trailing edge of the pocket and to receive such articles between them and the side wall of the drum.

2,310,322
LAWN RAKE
Loren H. Semler and Charles Rudolph, Chicago, Ill.
Application May 16, 1941, Serial No. 393,713
12 Claims. (Cl. 56—400.17)

1. A lawn rake of the character described

comprising a frame, a transverse bar mounted on said frame, a supporting member carried by said frame and spaced from the bar in substantially parallel relation thereto, clamping members carried by said member and extending therefrom beyond said bar, a plurality of flexible resilient tines each mounted at one end on said



supporting member, means on said supporting member for locking each of the tines against lateral movement, each of said tines being in engagement with said bar, and means for securing each tine to a clamping member at a portion of the tine beyond said bar whereby each tine is held in engagement with said bar and locked against longitudinal movement.

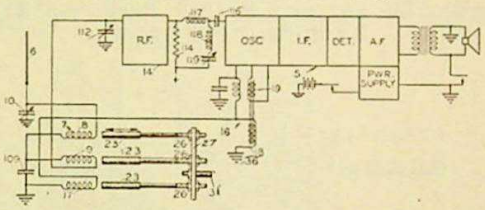
2,310,323

ANTENNA COUPLING AND TUNING SYSTEM FOR COMMUNICATION OR BROADCAST RECEIVERS

James W. Sharp, Chicago, Ill.

Application September 30, 1940, Serial No. 359,124

2 Claims. (Cl. 250—20)



1. In a radio receiver, a vacuum tube translating device forming part of said receiver, an antenna of the capacity type and a coupling circuit connecting said antenna to said translating device, said means comprising a first parallel tuned circuit including a capacitive reactance in parallel with an inductive reactance, said antenna and ground being connected across said capacitive reactance, a second parallel tuned circuit including a second capacitive reactance in parallel with a second inductive reactance, said translation device being connected across said second capacitive reactance, said first and second tuned circuits being capacitively coupled by a third capacitive reactance common to and in series in both of said parallel tuned circuits and having a value of capacity relatively large with respect to said first and second capacitive reactances, said inductive reactances being of the movable iron core type, and means for simultaneously moving the cores of said inductive reactances to vary the frequency response of said coupling circuit.

2,310,324

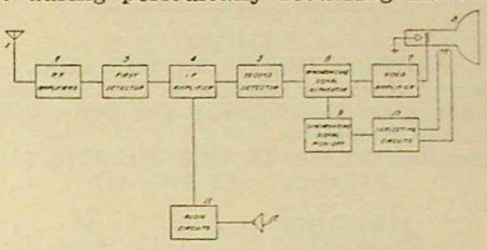
MODULATING SYSTEM

David B. Smith, Philadelphia, Pa., assignor to Philco Radio and Television Corporation, Philadelphia, Pa., a corporation of Delaware

Application July 8, 1941, Serial No. 401,494

21 Claims. (Cl. 178—7.2)

1. In a composite modulated carrier wave signal generating system, a carrier wave generator including space discharge means and an associated resonant circuit including reactive elements, a variable reactance device coupled to said circuit and adapted to have its reactance varied by a control voltage, a second variable reactance device coupled to said circuit and adapted to have its reactance varied in response to a second control voltage only when said second control voltage varies and exceeds a particular value, a source of a control voltage coupled to said first variable reactance device and adapted to vary the reactance thereof so as to maintain the frequency of the generated carrier wave substantially constant during periodically recurring intervals of



predetermined duration, a source of a second control voltage coupled to said second variable reactance device, said second control voltage exceeding said particular value only during portions of the intervals separating said first intervals, and means for modulating the amplitude of the carrier wave output of said generator during said first intervals.

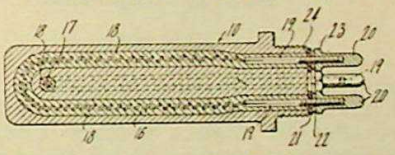
2,310,325

ELECTRICAL HEATING UNIT

John E. Smith, Plainfield, N. J.

Application December 30, 1937, Serial No. 182,531

5 Claims. (Cl. 201—67)



5. An electrical heating element comprising a pair of separate cores each having a resistance wire filament embedded in electrical insulation material and having terminal members secured to the ends of said filaments and protruding from the insulation material, the cores being formed to be substantially loop-shaped and disposed in planes substantially perpendicular to each other with the protruding terminal members thereof adjacent each other, a thermally conductive body having a cruciform portion with said cores respectively embedded in the opposite arms thereof except for the protruding portions of said terminal members, said body also having a round portion adjacent said terminal pins which is screw threaded, and a nut cooperating with said screw threaded portion.

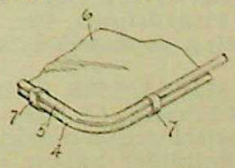
2,310,326

STRUCTURAL UNIT

Robert L. Swartwout, Albion, Mich., assignor to Union Steel Products Company, Albion, Mich., a corporation of Michigan

Application May 12, 1941, Serial No. 393,017

4 Claims. (Cl. 189—34)



1. A structural unit comprising a pair of endless frame members formed of rod stock and being of substantially the same size and shape disposed in side by side relation, a transparent panel of plastic material having its edges disposed between said frame members and having

spaced slots adjacent its edges, and bendable fastener straps welded at one end to the inner side of one of the said frame members and passed through said slots in said panel and around the other frame member and clamped upon the outer side of the frame member to which it is welded.

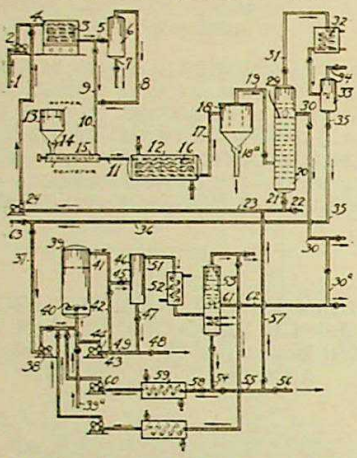
2,310,327

PRODUCTION OF MOTOR FUEL

William J. Sweeney, Elizabeth, N. J., assignor to Standard Oil Development Company, a corporation of Delaware

Application October 28, 1939, Serial No. 301,769

3 Claims. (Cl. 196—10)



1. A method of producing gasoline having a low acid heat, high octane number lead response by conversion of higher boiling hydrocarbons which comprises passing the oil to be converted through a cracking zone containing an active cracking catalyst and maintained at cracking temperature, keeping said oil in contact with said cracking catalyst within said cracking zone for a period sufficient to convert a substantial portion of said oil into motor fuel constituents, thereafter separating from the cracked products a light naphtha fraction substantially free of aromatic constituents and containing a substantial amount of olefinic constituents having a high acid heat, passing the fraction so segregated in a mixture with isoparaffins in such proportion that the molar ratio of isoparaffins to olefinic constituents is not less than one to one in contact with an active alkylating catalyst capable of accelerating the union between isoparaffins and olefins to form a saturated product and maintaining said mixture in contact with said catalyst for a period sufficient to alkylate a substantial amount of said olefins in said light naphtha fractions and to increase the boiling range thereof.

2,310,328

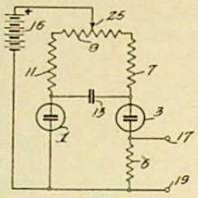
SQUARE WAVE GENERATOR

Gilbert Swift, Philadelphia, Pa., assignor to Radio Corporation of America, a corporation of Delaware

Application May 25, 1938, Serial No. 209,877

3 Claims. (Cl. 250—36)

3. The combination in a rectangular wave generator, of an amplifier having anode, grid and cathode electrodes; a source of direct current voltage connected in a series circuit between said anode and cathode electrodes; a self-bias resistor connected in said series circuit between said source and said cathode; output circuit means connected in said series circuit between said anode and said source; said grid being connected to a point on said bias resistor remote from said cathode to derive therefrom a self-bias potential, whereby a substantially constant voltage is developed in said output means of a value determined by said self-bias potential, the plate voltage, and the plate circuit impedance; and a



gas tube oscillator circuit comprising a gaseous discharge tube and said self-bias resistor connected in series with means causing intermittent breakdown of said tube and the flow of gaseous conduction current through said self-bias resistor for biasing said amplifier to plate current cut-off during the time of said breakdown.

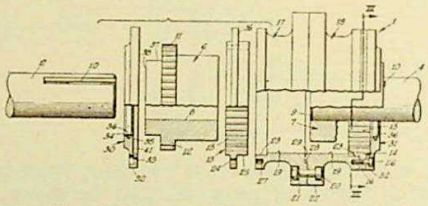
2,310,329

FLEXIBLE COUPLING

Warren C. Tyler, Phoenix, Ariz.

Application January 9, 1940, Serial No. 313,080

3 Claims. (Cl. 64—9)



1. In a flexible coupling for drivably interconnecting a pair of rotatable shafts, the combination of: a hub member secured to the end of each of said shafts, each of said hubs including an externally splined portion; a coupling member encircling said shafts and said hub members; a pair of ring members disposed at opposite ends of said coupling member, each of said ring members having internal splines drivably engaged with the externally splined portion of the hub member associated therewith, said ring members being formed of a softer and less wear-resistant material than that from which said hub members are formed; and means securing said ring members to opposite ends of said coupling member.

2,310,330

HOSIERY SHAPING DEVICE

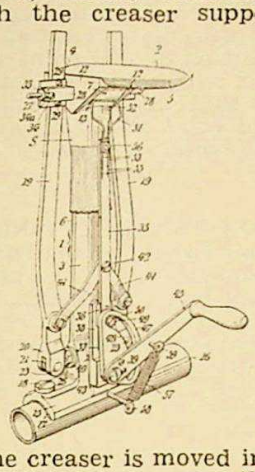
Andrew E. Vaughan and Andrew E. Vaughan, Jr., Pottstown, Pa., assignors to The Vaughan Knitting Company, Pottstown, Pa., a corporation of Pennsylvania

Application February 28, 1941, Serial No. 381,034

14 Claims. (Cl. 223—76)

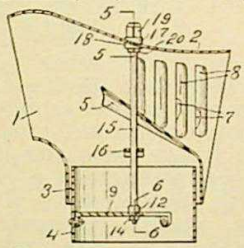
1. A hosiery shaping device including a hosiery mounting form with foot, leg and ankle portions and having creasing cavities at opposite sides thereof, and a creasing groove crosswise of the front of the ankle portion; presser blocks fitting the side cavities of the form; a pair of arms swingable about pivots which are fixed in respect to the form and supporting the presser blocks with capacity for movement laterally into and out of the cavities; a creaser fitting the creasing groove at the front of the ankle portion of the form; means for supporting the creaser for movement into and out of the

creasing groove; means connecting the arms aforesaid with the creaser supporting means,



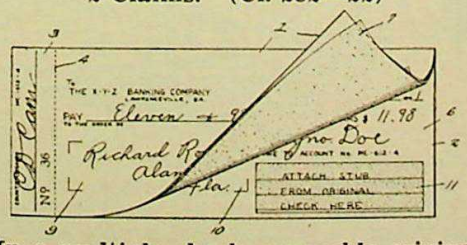
whereby, as the creaser is moved into its groove, the presser blocks are concurrently moved into the cavities aforesaid, and vice versa.

2,310,331
VENTILATOR
Richard A. Walker, St. Joseph, Mo.
Application February 10, 1941, Serial No. 378,125
5 Claims. (Cl. 98—70)



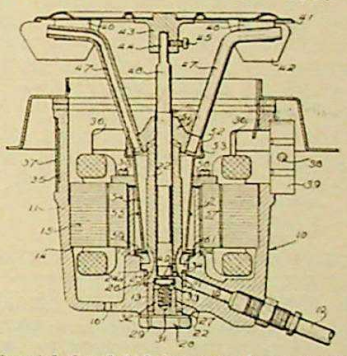
1. In a ventilator of the kind described, a vertical tubular support, a hood open at its front and rear ends and having an opening in its lower side into which said support extends, and having within it a transverse Venturi member spaced from and extending upwardly and rearwardly over said support, and providing respectively above and below said member two passages merging together at their rear ends and respectively communicating with said tubular support and the front end of said hood, the sides of said hood between the upper side thereof and said Venturi member having each louver covered air intake passages, and means for revolubly supporting said hood on a vertical axis on said support, said hood having a vane disposed to normally swing said hood with its front end directed to the windward.

2,310,332
MULTIPLE CHECK
Early A. Wilbanks, Buford, Ga.
Application April 11, 1942, Serial No. 438,642
2 Claims. (Cl. 282—22)



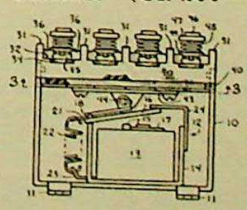
1. In a multiple check, separable original and duplicate sheets normally connected, each having a main portion provided with an appropriately designated space for the signature of the drawer and an end portion provided with an appropriately designated space for the signature of the countersigner, said end portion of the main portion of the check constituting a removable stub, means interposed between the original and the duplicate portion for transferring to the duplicate portion a copy of all matter written on the original portion, there being an appropriately designated area on the duplicate portion proportioned to receive the stub when removed from the original portion, and means for attaching said stub to the duplicate portion in said last named appropriately designated area.

2,310,333
LIQUID FUEL BURNING APPARATUS
John A. Wilson and Noel H. Sutterfield, Detroit, Mich., assignors to The Timken-Detroit Axle Company, Detroit, Mich., a corporation of Ohio
Application October 12, 1940, Serial No. 360,994
17 Claims. (Cl. 103—100)



1. In a liquid fuel lifting and projecting device, a liquid fuel reservoir adapted to have liquid fuel maintained at a substantially constant level therein; a hollow structure mounted for rotation about a substantially vertical axis and having its lower end immersed in the liquid fuel in said reservoir and having discharge means adjacent its upper end; means for rotating said structure; means on the interior of said structure for lifting fuel from said reservoir; and liquid flow impeding means, located in the path of upward travel of the lifted fuel, for causing a substantial quantity of fuel to accumulate as an annular body at a predetermined level in said structure, for controlling the flow of liquid fuel upwardly in said structure towards said discharge means.

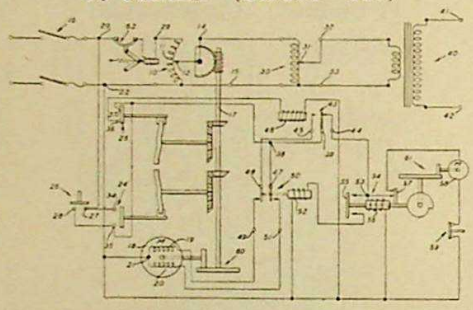
2,310,334
RELAY
John M. Wilson, Minneapolis, Minn., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a corporation of Delaware
Application January 27, 1941, Serial No. 376,058
20 Claims. (Cl. 200—104)



1. In a relay, a frame of substantially U-shaped cross-section, an electromagnet mounted on the bight of said U-shaped frame, a clapper-type armature mounted above said electromagnet for cooperation therewith and biased to move upwardly from said electromagnet, an insulating

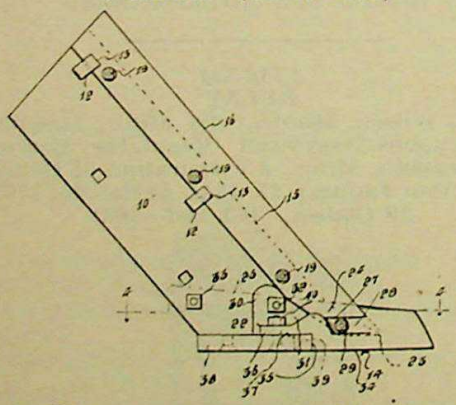
plate supported across the legs of said U-shaped frame and having a transverse slot above said armature and a plurality of longitudinal ridges in its upper surface, said ridges spanning said slot, stationary contacts mounted on said plate between each two adjacent ridges on both sides of said slot, a movable contact carrying member, means flexibly supporting said member in said slot, a connection between said member and said armature and adapted to allow relative lateral movement of said member and said armature, and contacts mounted on said member so as to lie between said ridges and overlie said stationary contacts.

2,310,335
ELECTRICAL APPARATUS
Henry M. Wolfson, New York, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a corporation of New York
Application January 10, 1941, Serial No. 373,968
10 Claims. (Cl. 171—119)



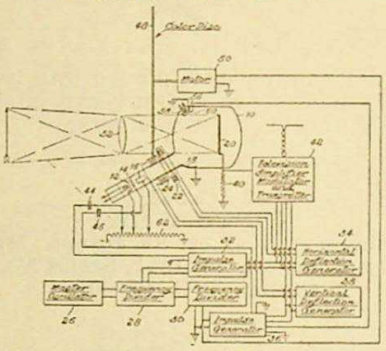
1. In an electrical apparatus having input terminals and output terminals, a variable voltage output transformer to receive an electric current from the input terminals and deliver current modified thereby to the output terminals, a constant speed electric motor to drive the variable transformer to vary the voltage of the output thereof from a predetermined minimum to a predetermined maximum in a predetermined period of time, and a time delay relay to stop the said motor and to reverse the same.

2,310,336
PLOW POINT
John M. Zwaska, Auburndale, Wis.
Application August 17, 1939, Serial No. 290,682
6 Claims. (Cl. 97—125)



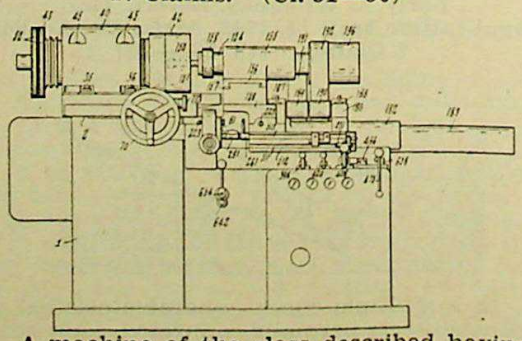
1. A plow comprising a point having a recess to receive an end of a plow blade, said point having an angular member, formed integral therewith and adjacent the rear of said recess a share secured to one of the sides of said angular member and having a tapered lower edge overlying said blade, fastening means for securing said blade to said share, said point having a recessed portion in its upper side and rearwardly of its forward end, a shin plate removably mounted in the recessed portion of said point and removably secured thereto, said shin plate partially overlying one end of said share for clamping it to said point, and said point including a landside provided with a detachable section.

2,310,337
TELEVISION TRANSMITTING SYSTEM
Earl I. Anderson, Bayside, Long Island, and Allen Barco, Jackson Heights, N. Y., assignors to Radio Corporation of America, a corporation of Delaware
Application February 11, 1941, Serial No. 378,348
9 Claims. (Cl. 178—5.4)



1. A television transmitting system comprising a transmitting tube having an electron gun structure for generating a cathode ray beam and a light responsive electrode, means for projecting an optical image onto the light responsive electrode to produce thereon a charge image in accordance with the intensity of the light projected thereon, means for scanning the light responsive electrode by the generated cathode ray beam in substantially bilateral directions to produce picture signals and to thereby remove at least a part of the produced charge image at predetermined portions of the light responsive electrode, an additional source of diffused electrons included in said cathode ray tube, means for normally preventing emission of electrons from said additional source, and means for permitting an appreciable emission of diffused electrons from said source only for an interval during the return deflection of the cathode ray beam whereby the charge image on the light responsive electrode may be completely canceled.

2,310,338
METALWORKING MACHINE
Merton H. Arms, Springfield, Vt., assignor to Bryant Chucking Grinder Company, Springfield, Vt., a corporation of Vermont
Application November 9, 1940, Serial No. 365,071
17 Claims. (Cl. 51—50)



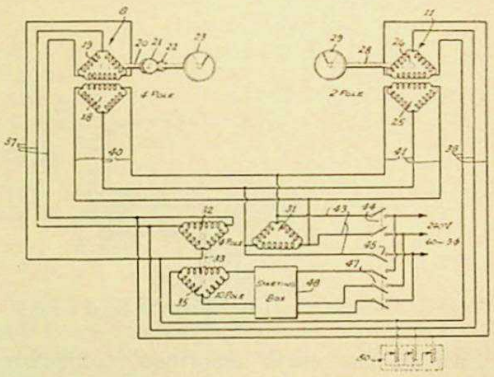
1. A machine of the class described having a

bed, a work support carried by said bed, a tool carriage rockably supported by said bed on an axis extending toward said work support and movable along said axis, a tool supported by said carriage above said axis and in position to operate on work carried by said work support, means for reciprocating said carriage, and means for adjusting the angular position of said carriage during its reciprocation.

2,310,339
DRIVE SYSTEM FOR PROCESS PHOTOGRAPHY

William F. Arndt, Los Angeles, Calif., assignor to Warner Brothers Pictures, Inc., a corporation of Delaware

Application July 26, 1940, Serial No. 347,799
3 Claims. (Cl. 172—293)

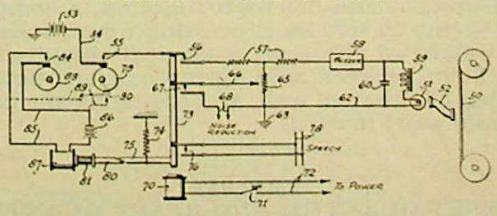


3. An interlock motor system comprising an interlock four-pole motor, a rotatable element driven by said motor, a two-pole interlock motor, a second rotatable element driven by said two-pole motor at the same speed as said first element, a four-pole distributor for said motors, the rotor of said distributor being connected to the rotors of said motors, said distributor and said interlock motors having the same winding ratio between their respective stators and rotors, and a motor for driving said distributor, the stators of all of said motors being supplied from a three-phase alternating current source of energy, the ratio between the frequency of said source of energy and the number of poles of said distributor driving motor being six-to-one.

2,310,340
FILM MARKING SYSTEM

William F. Arndt, Los Angeles, Calif., assignor to Radio Corporation of America, a corporation of Delaware

Application July 26, 1940, Serial No. 347,800
8 Claims. (Cl. 88—16.2)



1. In a sound picture system, the combination of a picture camera with driving means therefor, a sound recorder with driving means therefor, a light source for exposing a film in said picture camera, a light source for exposing a film in said recorder, said respective driving means accelerating and advancing both of said films at a constant speed, a circuit for energizing said first-mentioned light source and for exposing said recorder film to said second-mentioned light source, and means under control of at least one of said driving means for controlling said circuit, said means including a manually operable means for locking said energizing circuit in an energizing position and an automatically operable means for energizing said energizing circuit and for releasing said manually operable means.

2,310,341
RUSTLESS IRON

William Bell Arness, Bellevue, Pa., assignor to Rustless Iron and Steel Corporation, a corporation of Delaware

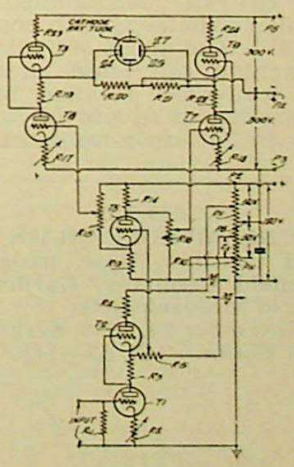
No Drawing. Original application June 20, 1938, Serial No. 214,813. Divided and this application January 27, 1941, Serial No. 376,197
3 Claims. (Cl. 219—8)

1. In articles of manufacture of the class described, a welding rod particularly adapted to give a tough, ductile and corrosion-resisting weld which is free from substantial air-hardening, said rod analyzing approximately 8 per cent to 15 per cent chromium, .3 per cent to 3 per cent manganese, .3 per cent to 3 per cent nickel, .3 per cent to 3 per cent molybdenum, .02 per cent to .07 per cent carbon and the balance substantially iron.

2,310,342
BALANCED DIRECT AND ALTERNATING CURRENT AMPLIFIERS

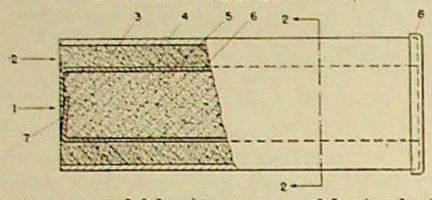
Maurice Artzt, Haddonfield, N. J., assignor to Radio Corporation of America, a corporation of Delaware

Application November 29, 1940, Serial No. 367,809
18 Claims. (Cl. 179—171)



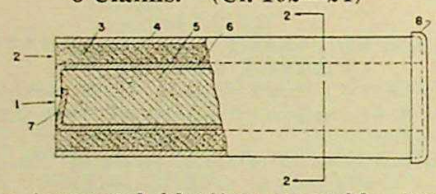
1. A balanced amplifier including an impedance means having end terminals and an intermediate terminal, a pair of electron discharge devices provided with cathode-anode circuits including three anode circuit resistors connected in series between said end terminals and the cathode of one device and the anode of the other device and between the remaining anode and cathode of said devices respectively, one of said discharge devices having its input circuit connected across the anode circuit resistor of the other device and its cathode connected through an output impedance to said intermediate terminal, and signal supply means connected to the input circuit of at least one of said devices.

2,310,343
BLASTING CARTRIDGE
Jacob Barab, Wilmington, Del., assignor to Hercules Powder Company, Wilmington, Del., a corporation of Delaware
Application July 16, 1940, Serial No. 345,712
8 Claims. (Cl. 102—24)



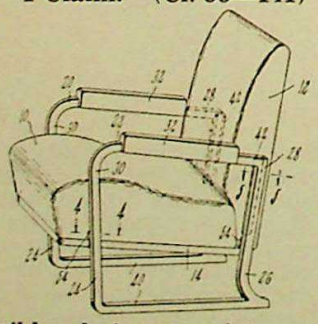
1. An improved blasting assembly including an explosive cartridge surrounded by a preformed, annular, tubular sheath comprising between about 10% and about 50% of expanded sodium silicate and a flame-quenching salt, said sheath characterized by a semi-rigid, cellular, favose structure which is adapted to provide a cushioning action for the initial explosive shock.

2,310,344
BLASTING CARTRIDGE
Jacob Barab, Wilmington, Del., assignor to Hercules Powder Company, Wilmington, Del., a corporation of Delaware
Application April 18, 1941, Serial No. 389,124
8 Claims. (Cl. 102—24)



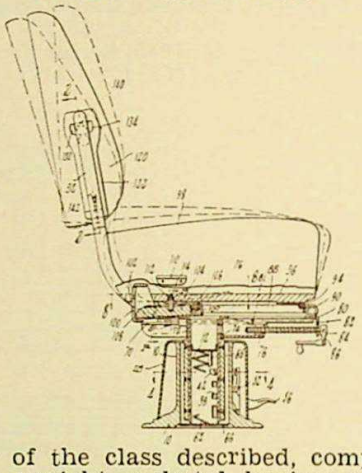
1. An improved blasting assembly including an explosive cartridge surrounded by a preformed, annular, tubular sheath comprising between about 30% and about 50% diatomite, and a flame-quenching salt, said sheath characterized by a semi-rigid, cellular, favose structure which is adapted to provide a cushioning action for the initial explosive shock.

2,310,345
COLLAPSIBLE CHAIR
Alfred B. Bell, Gardner, Mass., assignor to Heywood-Wakefield Company, Gardner, Mass., a corporation of Massachusetts
Application November 24, 1939, Serial No. 305,839
1 Claim. (Cl. 55—141)



A collapsible chair comprising a rigid seat-support frame, a pair of rigid side frames hinged to said seat frame, each said side frame including front and rear uprights having on their inner faces hinge elements cooperating with hinge elements on the upper face of said seat frame, a removable upholstered seat cushion supported on said seat frame, a removable upholstered back between said rear uprights, and interlocking means on said back and rear uprights cooperating to hold the chair assembled, said seat and back having recesses in the sides thereof arranged to enclose and conceal the hinges when the chair is assembled.

2,310,346
DRIVER'S CHAIR
Alfred B. Bell, Gardner, Mass., assignor to Heywood-Wakefield Company, Gardner, Mass., a corporation of Massachusetts
Application December 26, 1939, Serial No. 310,891
1 Claim. (Cl. 155—94)

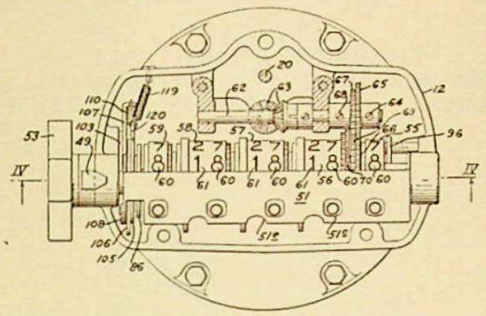


A chair of the class described, comprising a stationary upright pedestal having a vertical bore therein, a hollow cylindrical stem slidably mounted in said bore, spline means preventing rotation of said stem in said bore, a seat carried by said stem, and means for adjusting the height of the seat, said adjusting means including a vertical row of notches in the side of the stem forming ratchet teeth, each notch having a horizontal upper shoulder and an inclined lower shoulder, a pawl mounted on said pedestal and horizontally slidable through the side thereof to enter any of said notches, said pawl having a horizontal upper edge extending substantially to the extremity of the pawl and a lower edge which is horizontal except for an inclined portion adjacent to said extremity, each said notch being of such size as to receive the extremity of said pawl with its upper edge bearing on the horizontal upper shoulder of the notch and the inclined portion of the lower edge of said extremity bearing on the inclined lower shoulder of the notch, said stem also having an aperture therethrough below said notches and with horizontal upper and lower shoulders engageable by horizontal portions of the upper and lower edges of said pawl whereby to lock the stem against both upward and downward motion, a compression spring in said stem pressing upward against the weight of the seat, a vertical shield within said stem between said spring and the notched portion of the stem wall, and spring means pressing said pawl inward.

2,310,347
PRESET QUANTUM AND RESET QUANTITY COUNTER
William F. Berck, Hayward, Calif., assignor to Ralph N. Brodie Company, Oakland, Calif., a corporation of California
Application December 23, 1939, Serial No. 310,787
3 Claims. (Cl. 235—132)

1. In a device of the character described com-

prising a trip mechanism, a counter having a plurality of counter wheels mounted in axial alignment and each bearing thereon in fixed relationship two aligned sets of counting indicia arranged in relative reverse order and relatively offset one unit, an intermediate transfer drive connection between said wheels, a drive for said



counter, a trip element rotatable with each of said counter wheels having means to be aligned for effecting operation of the trip mechanism, and a selectively operable setting mechanism operatively associated with the counter wheels for resetting said wheels or for presetting said wheels bearing said sets of indicia and their trip elements to predetermined positions.

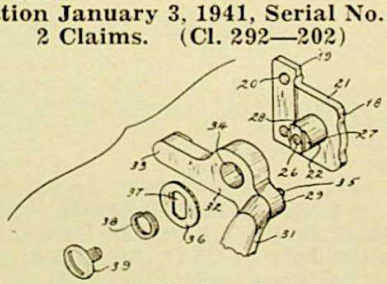
2,310,348

FASTENING DEVICE FOR WINDOWS

John Blears, Jamestown, N. Y., assignor to Hope's Windows, Inc., Jamestown, N. Y., a corporation of New York

Application January 3, 1941, Serial No. 373,015

2 Claims. (Cl. 292—202)



1. In a casement window fastener, a support having a bearing member projecting from one face thereof, a rotatable handle having an aperture through which said bearing member projects, a screw engaged with a threaded opening in the end of said bearing member, resilient means carried by and effective upon rotation of said screw in one direction to move said handle into predetermined frictional contact with said support, and further means carried by the end of said bearing member and interposed between said resilient means and said handle, said further means and said bearing member including parts cooperating to secure said further means against rotation and render said handle ineffectual to alter the predetermined frictional contact thereof with said support during rotation.

2,310,349

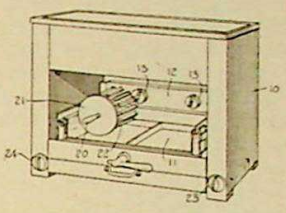
FOOD BROILER RACK

Stephen N. Bobo, New York, N. Y.

Application October 12, 1940, Serial No. 360,954

5 Claims. (Cl. 53—5)

1. A broiler comprising a housing open at one side; heating means disposed within the housing; food receiving means including a shaft, food receiving elements carried by the shaft, and handle means accessible at the open side of the housing for grasping and removing the food receiving means from within the housing; and single means disposed within the housing for



wholly supporting and rotating the shaft and therewith the food receiving means.

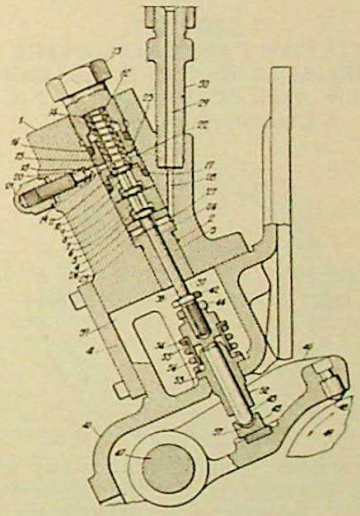
2,310,350

VALVE FOR FUEL INJECTION SYSTEMS

Charles M. Bovard, Mount Vernon, Ohio, assignor to Cooper-Bessemer Corporation, Mount Vernon, Ohio, a corporation of Ohio

Application September 30, 1939, Serial No. 297,249

6 Claims. (Cl. 277—42)



1. In a liquid fuel injection system for internal combustion engines: a fuel inlet, a fuel outlet and a valve passage therebetween, a plurality of independently seating disc valves and associated valve seats arranged seriatim in said passage, means for simultaneously seating and unseating said valves including interposed valve spacers, a pressure-actuated relief valve adjacent said outlet, and means maintaining said relief valve in resilient engagement with one of said disc valves when seated for permitting actuation thereof when said disc valves are seated, by pressure in said outlet exceeding a preselected value.

2,310,351

STOPPER FOR PIPES

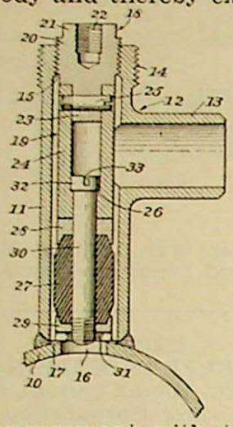
Walter J. Bowan and Elmer H. Fawley, Decatur, Ill., assignors to Mueller Co., Decatur, Ill., a corporation of Illinois

Application February 12, 1941, Serial No. 378,684

6 Claims. (Cl. 138—89)

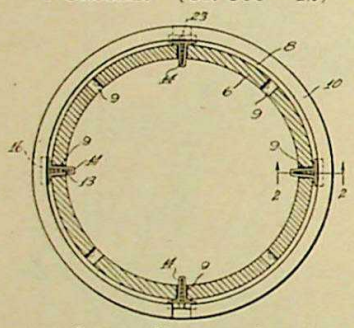
1. The combination with a T having its cross portion secured in substantially radial communicating relation to a main, the outer end of said cross portion being internally threaded, and a portion of the main providing a shoulder at the inner end of said cross portion, of a stopper including a rubber body, said stopper being insertable in said cross portion and against said shoulder to position said rubber body between the stem portion of the T and the main, and

means threadable in said outer end to compress said rubber body and thereby expand the latter



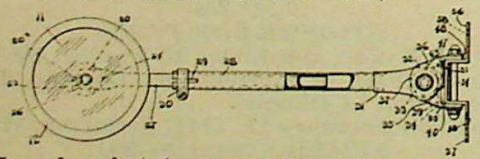
into sealing engagement with the surrounding walls of the T.

2,310,352
PISTON PACKING DEVICE
William Cords, San Diego, Calif.
Application April 22, 1940, Serial No. 331,032
5 Claims. (Cl. 309—42)



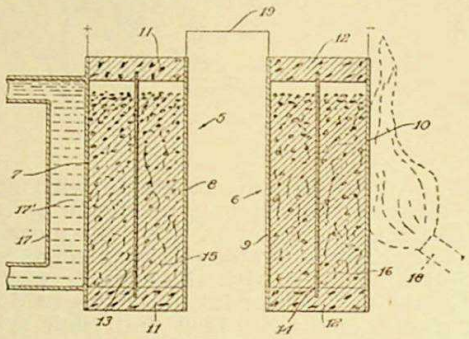
1. An expander unit assembly for association with the oil drainage hole of a hollow piston or the like, said assembly comprising an elongated coil spring, a socket for reception of said spring and designed to project into said hole and shaped to frictionally hold the inner end of said spring, and means at the outer end of said spring designed to be thrust radially outward by the latter and shaped to engage the inner edge of a packing ring.

2,310,353
REAR VIEW MIRROR AND BRACKET
Albert B. Dettmer, Cincinnati, Ohio, assignor to The K-D Lamp Company, Cincinnati, Ohio, a corporation of Ohio
Application February 27, 1941, Serial No. 380,781
2 Claims. (Cl. 248—289)



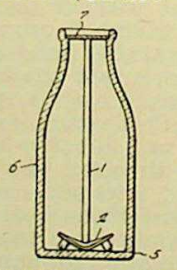
1. In a bracket for rear view mirrors, an arm, and a clamp at the vehicle-mounted end of the arm, said clamp comprising two telescoping members of substantially identical form, each comprising a structure of two-eared construction having a lug at the juncture of the ears, one of said members occupying a position with its ears between the ears of the other member and with the lugs of the members occupying opposed positions, and means to clamp said ears of the telescoped members upon the arm, whereby positions of adjustment of the arm and clamp members will be fixed and whereby positions of adjustment of the clamp member lugs will be fixed relatively to a vehicle body mounting element located between them.

2,310,354
THERMOELECTRIC CELL
Raymond H. Deysher, Fleetwood, Pa.
Application April 2, 1940, Serial No. 327,504
2 Claims. (Cl. 136—83)



1. A cell useful in creating an electropotential difference which comprises a pair of similar units, each of said units comprising spaced confronting electrodes of the same metal and an electrolyte including a mixture of undissolved polar salt and dissolved salt of the electrode metal, said units being connected in series, and diaphragms within each of said units between the electrodes thereof and separating the cells into two compartments, said diaphragms each comprising a porous plate of electrically conducting material, means for heating one electrode of one cell, and means for cooling the opposed electrode of the other cell.

2,310,355
CREAM SEPARATOR
Ralph O. Eastin, Mountain Grove, Mo.
Application July 14, 1941, Serial No. 402,405
2 Claims. (Cl. 210—51.5)

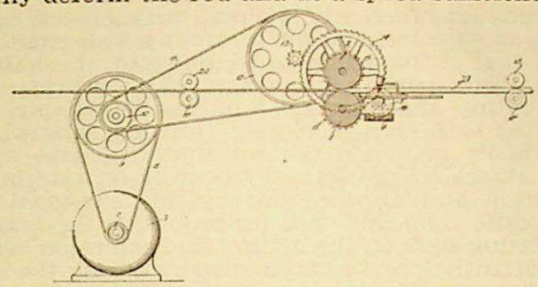


1. A cream separator for insertion in a milk bottle comprising a resilient disk adapted to be inserted in the bottle, means on the disk for supporting same in elevated position on the bottom of the bottle, and a stem on the disk offset relative to the supporting means and adapted to flex said disk, said stem being of a length to protrude above the level of the contents of the bottle when the disk is unflexed.

2,310,356
ROLLING OF FLAT STRIPS
Daniel A. Eberhardt, St. Louis, Mo.
Application August 2, 1940, Serial No. 349,409
4 Claims. (Cl. 80—60)

1. The method of forming flattened strips comprising passing a galvanized rod between

pressure rolls at a pressure sufficient to substantially deform the rod and at a speed sufficient to



heat the rod at the rolls by the action of the rolls from room temperature to a temperature between 250° and 300° F.

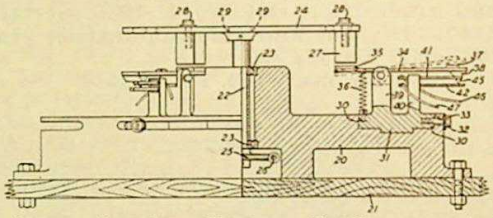
2,310,357

ADJUSTABLE CAMLIKE CONTROL APPARATUS

Beril Edelman, Brooklyn, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a corporation of New York

Application January 13, 1940, Serial No. 313,703

2 Claims. (Cl. 74—1)



1. Apparatus to effect cyclically repeated initiation of a plurality of operations and adapted to provide adjustability of the time intervals between the initiations of a cycle, the said apparatus comprising a base member, a support member rotatable continuously in one direction relatively thereto, a cyclic plurality of mutually independent operation initiating means mounted on one of the said members and each magnetically actuable without mechanical contact with any actuating means to initiate a specific operation of the cycle, a cyclic plurality of mutually independent magnetic actuating means mounted on the other of said members to be brought successively and cyclically by relative rotation of the members into actuating relation with each of the actuable operation initiating means in turn, and means to render each actuable means adjustable in position on the member on which the same is mounted as to spacing relative to adjacent other units of the plurality of actuable means.

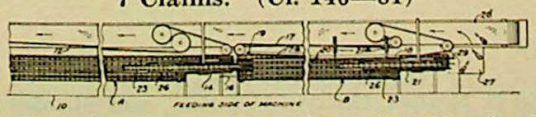
2,310,358

ASPARAGUS PROCESSING MACHINE

William J. Emmons, Alameda, and Bernard S. Gallagher, Piedmont, Calif.

Application August 3, 1940, Serial No. 350,950

7 Claims. (Cl. 146—81)



1. In a machine of the character described, a pair of longitudinally aligned feeding conveyors operating in the same direction, the second of said conveyors operating at a higher speed than the first of said conveyors to spread a thick layer of asparagus deposited on and received from said first conveyor in a materially thinner layer, abutment means extending along and closely adjacent to the same sides of said conveyors, asparagus cutting means for each conveyor positioned inwardly thereof from said abutment means, the transverse distance between said second conveyor cutting means and its cooperable abutment means being less than the transverse distance between said first conveyor cutting means and its cooperable abutment means.

2,310,359

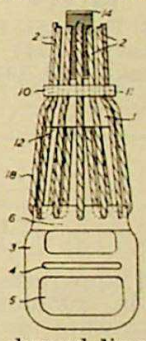
CORD ASSEMBLY, PARTICULARLY FOR PARACHUTES

Donald Finlayson, Ernest Leslie Greenwood, and Leonard Latham, Spondon, near Derby, England, assignors to Celanese Corporation of America, a corporation of Delaware

Application November 22, 1940, Serial No. 366,566

In Great Britain December 8, 1939

9 Claims. (Cl. 244—151)



2. A parachute shroud-line attachment comprising a common sliding member to which the ends of a number of cords may be connected, said member having a bulbous body and a flange on one side thereof which is perforated for the passage of each of said cords so as to constrain said cords to pass close to the axis of said bulbous body and to exert sliding friction on a part of the length of each of said cords, and a common connecting member disposed on the side of said sliding member remote from the said flange and having, for each cord, a passage through which said cord may pass between said part of its length and its end, said passages being evenly spaced radial passages symmetrically disposed about the axis of the connecting member.

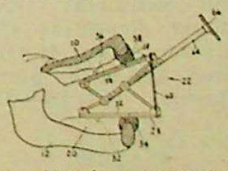
2,310,360

METHOD OF AND MEANS FOR REGISTERING BITE RIMS OR BLOCKS

Abraham Fischer, Brooklyn, N. Y.

Application January 15, 1940, Serial No. 313,879

12 Claims. (Cl. 32—19)



1. Means for aligning upper and lower bite rims comprising a first member adapted to be secured to the lower bite rim, a second member adapted to be secured to the upper bite rim, said first and second members comprising flat metal plates provided with prongs for releasably securing said plates to said lower and upper bite rims respectively, means for registering said second member with said first member with the latter secured to the lower bite rim in central position with respect thereto whereby said second member is in central alignment with said lower bite rim,

said registering means comprising opposed confronting relatively movable upper and lower members engageable with and between said first and second members, said second member being removably seated on the upper surface of said upper member of said registering means, said upper and lower members being positioned in the space between the opposed surfaces of said two first mentioned members, respectively, and means associated with said relatively movable members for moving the upper member relatively to the lower member to secure said second member to said upper bite rim while the bite rims are in the patient's mouth and said second member is in registry with said first member in said position thereof.

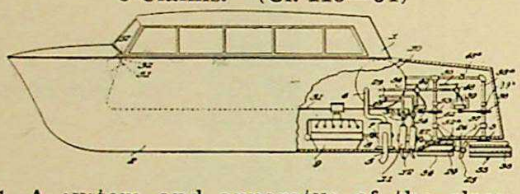
2,310,361

SYSTEM AND APPARATUS FOR PROPELLING BOATS

Charles R. Ford, St. Louis, Mo.

Application February 7, 1941, Serial No. 377,908

3 Claims. (Cl. 115—34)



1. A system and apparatus of the class described including, in combination with a boat having a hull, a pressure tank within the hull, a pump having a discharge pipe connected with the pressure tank, an inlet pipe for the pump, a motor for operating the pump for maintaining water at a constant uniform pressure within the pressure tank, a turbine having a rotor and a shaft, said shaft extending through the hull, a propeller on the shaft, said rotor provided with a housing having inlet necks and an exhaust neck, inlet pipes connected with the inlet necks, a distributor connected with the inlet pipes, a selector valve within the distributor, a pipe connecting the distributor with the pressure tank, and means for shifting the selector from a neutral position wherein water pressure is equalized at each side of the rotor to an operative position wherein water under pressure is introduced to the rotor at one side thereof for causing rotation of said rotor, shaft and propeller.

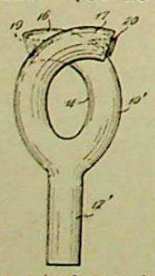
2,310,362

INDESTRUCTIBLE FORM FOR USE IN THE PRODUCTION OF INFLATABLE SEAMLESS ARTICLES

Robert R. Frissell, Sandusky, Ohio, assignor to The Barr Rubber Products Company, Sandusky, Ohio, a corporation of Ohio

Application August 29, 1938, Serial No. 227,260

8 Claims. (Cl. 18—41)



1. A form for repeated use in producing, from latex or other dispersions of rubber, an inflatable seamless tubular walled opening encircling article of desired shape having an integral hollow stem by which the article may be inflated comprising an inherently resilient body portion having an opening and an encircling wall simulating that of the article to be produced, the wall of said body portion being severed to provide cooperating abutting ends; means detachably securing said ends in closely abutting relation to normally maintain the continuity of said wall, an extension projecting outwardly on said body portion and disposed on the side substantially opposite from said ends for producing the hollow inflating stem on the article, said extension being sufficiently long to afford support during the applying operation; said ends being relatively separable and movable laterally out of abutting relation whereby the article may be stripped from the form.

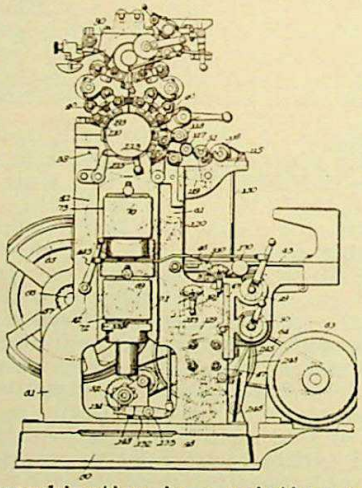
2,310,363

PRINTING PRESS DAMPENING ROLL CONTROL

George Goebel, deceased, late of Baltimore, Md., by Helene Goebel, administratrix, Baltimore, Md., and Eibe A. Wilckens, Baltimore, Md., assignors to Crown Cork & Seal Company, Inc., Baltimore, Md., a corporation of New York

Original application October 1, 1936, Serial No. 103,592. Divided and this application May 3, 1940, Serial No. 333,253

4 Claims. (Cl. 101—147)



4. The combination in a printing press, of a printing couple, a water fountain, means to transmit water from said water fountain to an element of said printing couple, means to actuate said last-named means including a pair of rods having their ends normally in abutment, means to guide one of said rods for reciprocable movement, the other rod being pivotally mounted so that it may be swung out of alignment with said first rod, means to limit the swinging movement of said second rod, and sheet controlled means to move said rods from abutting engagement and to restore them to such engagement.

2,310,364

DAMPER CONTROLLER

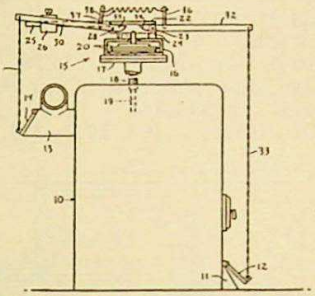
John E. Haines, Gordon F. Laing, and Stanley W. Nickells, Chicago, Ill., assignors to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a corporation of Delaware

Application October 11, 1939, Serial No. 298,924

8 Claims. (Cl. 236—16)

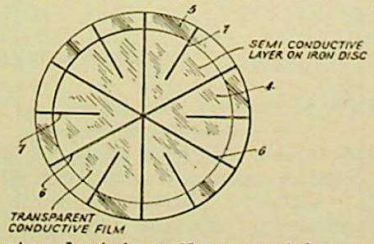
3. A damper mechanism comprising, in combination, a damper movable into and out of engagement with a damper port, a damper motor

for moving said damper, said damper exerting a force upon said motor when away from said port; a damper arm operated by said motor, connecting means between said motor and said damper, a biasing means located in said connection between said motor and said damper, said biasing means exerting a force at all times tending to move said damper out of engagement with said port, and a stop means forming a non-yieldable connection between said motor and said damper for moving said damper away from said port.



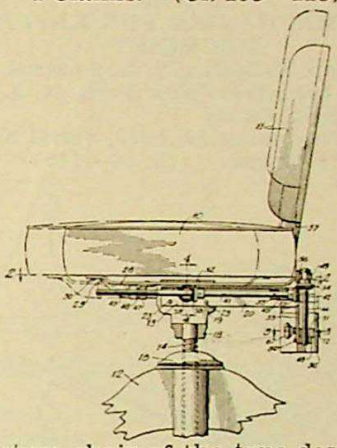
5. In a heating system, in combination, fuel burning means including a draft damper and a check damper, a chamber associated with said fuel burning means and adapted to expand on increased rates of heat production within said fuel burning means, pivoted lever means adapted to be positioned by expansion and contraction of said chamber, connections between said lever means and said dampers for opening said draft damper when heat is being produced at a relatively low rate and for opening said check damper when heat is being produced at a relatively high rate, biasing means interposed in one of said connections acting in a direction tending to cause opening of the damper to which said connection is attached, and stop means for rendering said biasing means ineffective at values of force above a predetermined magnitude transmitted by said lever to said connection, whereby the force transmitted to said lever means by said chamber necessary to open said damper means is only slightly greater than the force necessary to load said resilient means to the point where said stop means is effective.

2,310,365
PHOTO VOLTAIC CELL
Clarence W. Hansell, Port Jefferson, N. Y., assignor to Radio Corporation of America, a corporation of Delaware
Application December 12, 1939, Serial No. 308,830
3 Claims. (Cl. 136—89)



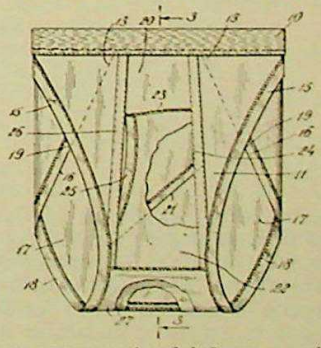
1. A photo electric cell comprising a disc-like metallic surface, a semi-conductive layer deposited on said metallic surface, a transparent conductive layer covering said semi-conductive layer, an insulating film covering said transparent conductive layer, a conductive film coated over and located at the periphery of said cell and in electrical conductivity with said transparent conductive layer, and a plurality of narrow conductive lines coated over and extending radially from one portion of said conductive path to another and electrically connected therewith to divide the active surface area of said cell into a plurality of smaller parts to decrease its resistance path.

2,310,366
POSTURE CHAIR
Frank B. Harman, Grand Rapids, Mich.
Application June 24, 1939, Serial No. 280,959
4 Claims. (Cl. 155—115)



1. A posture chair of the type described, comprising a seat, a back, and means supporting said seat and said back, said means comprising a frame, a pair of screw shafts rotatably mounted on said frame, one of said shafts threadedly engaging said back, and the other of said shafts threadedly engaging said seat, gearing for rotatably connecting said screw shafts, and means for rotating one of said screw shafts, said screw shafts being so related that the rotation of one effects simultaneously an upward movement of the back and an outward movement of the seat and simultaneously a downward movement of the back and an inward movement of the seat.

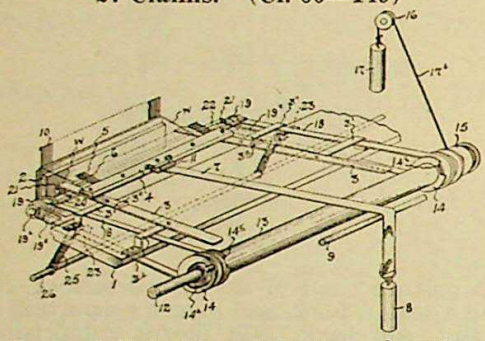
2,310,367
UNDERGARMENT
Asa J. Harwood, Richmond, Ind., assignor to The Atlas Underwear Company, Piqua, Ohio, a corporation of Ohio
Application October 16, 1941, Serial No. 415,278
3 Claims. (Cl. 2—224)



1. A nether garment which comprises a waistband, and front and rear sections secured to the waistband and extending downwardly therefrom and united to form a closed crotch, the sections being of decreasing width downwardly and the back section being wider at the top than the front section, the sections being secured to the waistband with the upper corner portions of the sections overlapping and with the corners of the back section lying along the front of the waist-

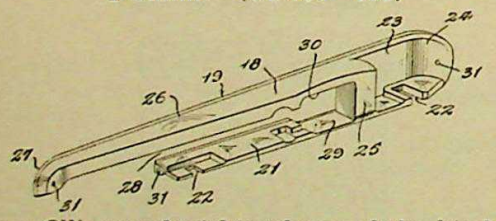
band and at greater distances inward from the sides of the garment than the corners of the front section, the side edges of the sections crossing at the front of the garment substantial distances below the waistband and defining leg openings facing forwardly, the side edges of the sections being unattached where they cross so that the size of the leg openings may be increased.

2,310,368
WELT MECHANISM FOR KNITTING MACHINES
Carlos A. Hepp, Palisade, N. J., assignor to Alfred Hofmann, Inc., West New York, N. J., a corporation of New Jersey
Application November 13, 1940, Serial No. 365,429
27 Claims. (Cl. 66—149)



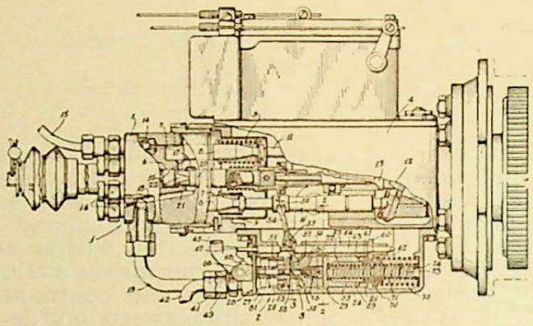
1. In a full-fashioned hosiery knitting machine, a welt rod actuating mechanism comprising, in combination with a single wareroller shaft, means for engaging the welt rod, and a single means actuated by said wareroller shaft for moving said first means in one direction to receive the welt rod, and then moving said first means in the opposite direction to actuate said rod in draw-off direction, said second means including a pulley mounted on said wareroller shaft and a folded strap engaging said first means and having its end portions wrapped in opposite directions upon said pulley.

2,310,369
SHUTTLE BOX
Walter L. Hicks, Trion, Ga.
Application June 13, 1941, Serial No. 397,975
1 Claim. (Cl. 139—183)



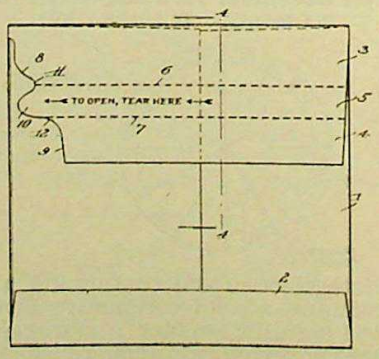
In a filling replenishing loom of the kind having a shuttle box at the replenishing side of the loom formed with a thread-passing and parting opening in its front wall and constructed with shuttle-engaging surfaces from end to end, a box front plate therefor consisting of an upper member continuous throughout the length of the box, and a lower member aligned with the upper member and together therewith forming the front of the box, said lower member being rigidly secured to the lay of a loom and extending from the outer end of the box and stopping short of the inner end of the box so as to lie close to the delivery eye of a shuttle boxed in said box, the upper and lower members being spaced to form a longitudinal slot for the purposes described, said upper member being continued beyond the lower member inwardly adjacent the level of said slot and said upper member being free at its inner end and allowing resilient yielding action under initial impact of a shuttle, but constructed to assume a fixed position against a boxed shuttle.

2,310,370
PUMP STRUCTURE
James F. Hoffer, Detroit, Mich., assignor to Ex-Cell-O Corporation, Detroit, Mich., a corporation of Michigan
Original application May 7, 1938, Serial No. 206,509. Divided and this application July 8, 1940, Serial No. 344,343
21 Claims. (Cl. 103—37)



1. A pump structure comprising, in combination, a pump having a chamber, a pump cylinder open at one end to said chamber and having fluid supply and discharge means connected to the other end, a piston reciprocable in said cylinder and means in said chamber for driving said piston, and a second pump driven from said last mentioned means in timed relation to said first mentioned pump and operable to return fluid leaking from said cylinder into said chamber back to said fluid supply means of said first mentioned pump.

2,310,371
PHOTOGRAPHIC MATERIAL CONTAINING ENVELOPE
Frank H. Lines and Raymond W. Towle, Sr., Rochester, N. Y., assignors to Defender Photo Supply Co., Inc., Rochester, N. Y., a corporation of New York
Application April 3,1940, Serial No. 327,586
2 Claims. (Cl. 229—85)



1. A photographic material containing envelope formed of tough paper stock and comprising an integral sealing flap which includes a wide tear strip of approximately one-half to five-eighths of an inch in width defined by spaced lines of perforations, the tear strip being

spaced substantially from the adjacent end of the envelope by a distance of approximately double its width enabling the tear strip to lie flatwise against the envelope without bulging when the envelope is loaded with paper sheets and the sealing flap is secured to the body of the envelope, the sealing flap being cut away to afford a gripping portion at one end of the tear strip extending beyond the adjacent edges of the sealing flap, said cut-away portions having edges which connect with the adjacent edge of the gripping portion along continuous curves at the points where they intersect said lines of perforations whereby accidental tearing of said strip is obviated, and one of said points of intersection being located inwardly of the other in relation to the end of the gripping portion causing one of said lines of perforations to tear in advance of the other.

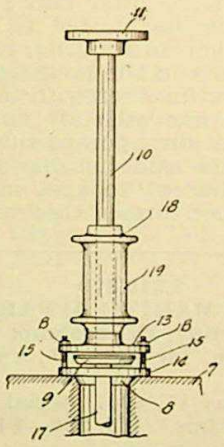
2,310,372

VALVE LIFTER

Harold L. Oserowsky, Bay City, Mich.

Application August 24, 1942, Serial No. 456,119

1 Claim. (Cl. 29—86.3)



A valve lifter comprising a stem, a head on the upper end thereof, vertically spaced disks mounted on the lower end of the stem and adapted to accommodate a valve head therebetween, spaced apart, threaded studs adjustably connecting said disks, a radial slot in the lower disk, and a striker member slidably mounted on said stem, and adapted to be raised to provide sharp impact with the head when the valve lifter is operated.

2,310,373

ATTACHMENT FOR MILLING MACHINES TO FACILITATE PRECISION REPRODUCTION OR DUPLICATION OF ARTICLES OR TEMPLATES

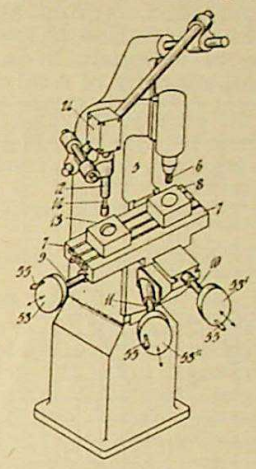
Claude Detlev Rieper, Deepdene, Victoria, Australia

Application January 2, 1940, Serial No. 312,144

In Australia February 4, 1939

21 Claims. (Cl. 90—13.2)

1. In a manually operable machine tool convertible into a duplicating machine, a rotary cutter; a support for the cutter; a work support guided in a definite path relatively to the cutter and adapted to support a pattern and a work piece with the latter in position to be acted upon by the cutter, traversing means for the work support, manually operable means for actuating the traversing means, a pair of normally engaged reversely acting ratchet clutches forming the operative connection between said manually operable means and said traversing means, and controllable motor means to selec-



tively disengage one or the other of said ratchet clutches.

2,310,374

POLYMERIZATION OF ROSIN AND ROSIN ESTERS

Alfred L. Rummelsburg, Wilmington, Del., assignor to Hercules Powder Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application December 18, 1940, Serial No. 370,668

16 Claims. (Cl. 260—97)

1. The process of polymerizing a material selected from the group consisting of rosin and rosin esters, which comprises subjecting said material at a temperature substantially within the range of from about 40° C. to about 200° C. to the action of a polymerizing agent selected from the group consisting of phosphorus pentoxide and polyphosphoric acids, and maintaining the material and polymerizing agent at said temperature for a sufficient length of time to effect polymerization of said material without substantial decomposition of the material.

2,310,375

POLYMERIZATION OF ACYCLIC TERPENES IN THE PRESENCE OF A PHOSPHORIC ACID CATALYST

Alfred L. Rummelsburg, Wilmington, Del., assignor to Hercules Powder Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application May 31, 1941, Serial No. 396,213

16 Claims. (Cl. 260—666)

4. The process of polymerizing an acyclic terpene having three double bonds per molecule which comprises contacting said acyclic terpene with a phosphoric acid catalyst at a temperature within the range of from about 10° C. to about 150° C., and hydrolyzing the phosphate esters formed by heating the polymerized product with an aqueous inorganic acid having an acid concentration between about 1% and about 60% by weight.

2,310,376

MOTOR FUEL

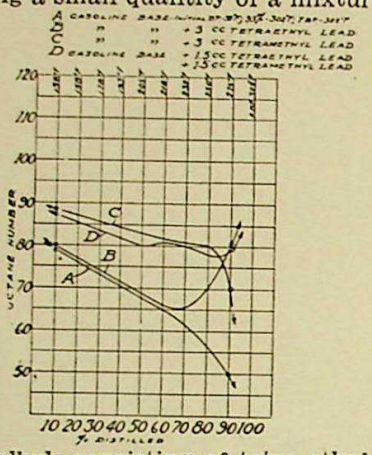
William H. Smyers, Westfield, and Thomas Cross, Jr., Elizabeth, N. J., assignors to Standard Oil Development Company, a corporation of Delaware

Application August 15, 1936, Serial No. 96,188

2 Claims. (Cl. 44—69)

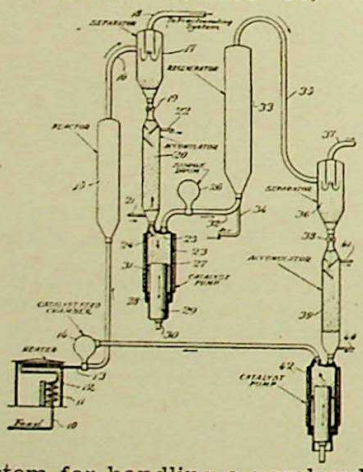
1. Liquid fuel for internal combustion engines

of the Otto cycle multicylinder type comprising a mixture of hydrocarbons of such varying volatility and forming such varying air-fuel ratios as to cause material variation in knocking tendency of the several cylinders in operation and containing a small quantity of a mixture of vola-



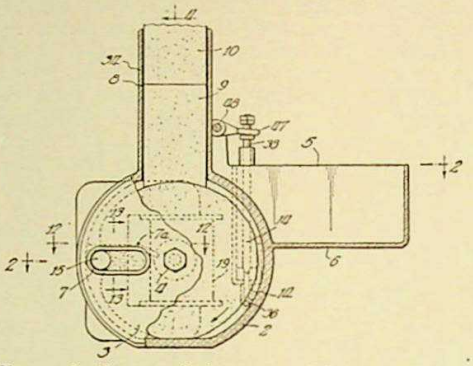
tile lead alkyls consisting of tetra ethyl lead, tri ethyl methyl lead, diethyl di methyl lead, ethyl tri methyl lead, and tetra methyl lead, whereby variation in separate cylinder knocking tendency is eliminated and the antiknock value of the fuel is raised.

2,310,377
SYSTEM FOR HANDLING ABRASIVE POWDER
Vanderveer Voorhees, Homewood, Ill., assignor to Standard Oil Company, Chicago, Ill., a corporation of Indiana
Application October 31, 1940, Serial No. 363,640
9 Claims. (Cl. 196—52)



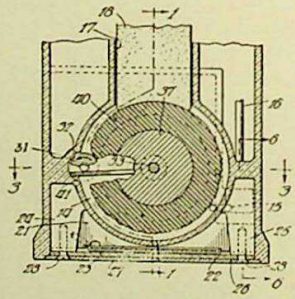
1. A system for handling a powdered abrasive solid material which comprises a collecting chamber means for introducing a powdered abrasive solid material into said collecting chamber, means for aerating the solid material in said chamber whereby the powdered solid behaves as a fluid, a pump chamber, a valve connection from said collecting chamber to said pump chamber, a discharge chamber, a valve connection between said pump chamber and said discharge chamber, a reciprocating piston in said pump chamber for drawing aerated powdered abrasive solid material from the collecting chamber into the pump chamber and for discharging said material from the pump chamber to the discharge chamber and a molten metal seal in said pump chamber for preventing solid particles from abrasive contact with said piston.

2,310,378
LATHER MACHINE
Leo J. Wahl, Sterling, Ill., assignor to Wahl Clipper Corporation, Sterling, Ill., a corporation of Illinois
Application December 30, 1940, Serial No. 372,301
10 Claims. (Cl. 299—83)



1. In a lather mixing machine, a housing, a roller mounted for rotation therein, soap bar guide means above said roller adapted to hold a bar of soap with its lower end resting on the roller, so that the bar is fed to the roller by gravity as the roller, in rotating, rubs soap from the bar, and means in the housing engaging the roller and cooperating therewith to mix soap removed from the bar with air and liquid, said roller having a yielding porous surface engaging the soap bar, and said housing having a discharge spout adjacent to said means for discharging the lather formed therein.

2,310,379
LATHER MAKING APPARATUS
Leo J. Wahl, Sterling, Ill., assignor to Wahl Clipper Corporation, Sterling, Ill., a corporation of Illinois
Application May 17, 1941, Serial No. 393,979
8 Claims. (Cl. 299—84)

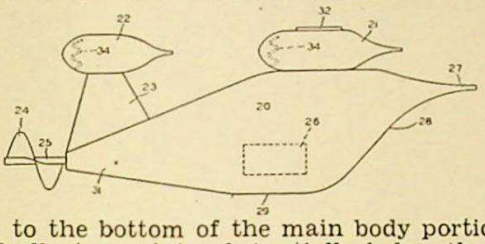


1. A lather mixing apparatus, comprising a lather forming member of resilient porous material, a support for said member, said support having flanges confining said member, a drive roller pressing on the surface of said member opposite the support to drive the member, said drive roller substantially meeting said flanges whereby to define with the support and its flanges a restricted channel for said member to pass through, and means to supply a film of soap to the surface of said member prior to its passage through the restricted channel.

2,310,380
BOAT
Robert M. Woods, Wheeling, W. Va.
Application May 22, 1941, Serial No. 394,588
6 Claims. (Cl. 114—56)

1. A boat including a substantially stream-

lined hull, said hull characterized by having a main body portion with a horizontal deck, a pointed nose extending forwardly from the upper part of the main body portion and normally adapted to be in a slightly submerged position, the forward portion of the main body of the hull presenting a laterally extending surface curved downwardly from the forward tip of the pointed



nose to the bottom of the main body portion of the hull at a point substantially below the forward portion of the deck, the rear of the main body portion of the hull sloping downwardly from said deck to a submerged point forming the rear end of the hull in a plane substantially with the bottom of the main body portion of the hull, and propeller means extending rearwardly from said submerged rear end portion of the hull.

2,310,381

TREATMENT OF FERROUS BEARING METALS

John C. Zimmer, Hillside, and Arnold J. Morway, Roselle, N. J., assignors to Standard Oil Development Company, a corporation of Delaware

No Drawing. Application December 3, 1937, Serial No. 177,928

1 Claim. (Cl. 148—6.5)

A process of preparing a ferrous metal bearing surface for use with a mineral lubricating oil comprising chemically treating said surface with an aqueous solution of dibasic sodium phosphate which will react therewith to form a coating of iron phosphate thereon.

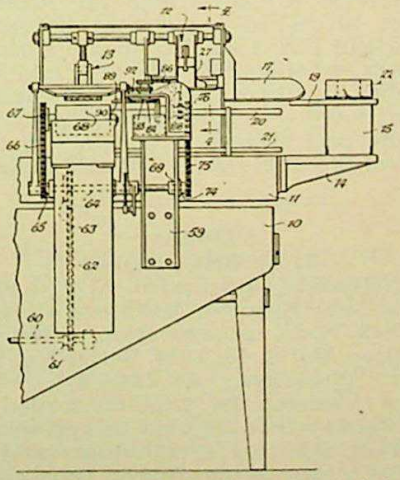
2,310,382

METHOD AND MEANS FOR SEALING CONTAINERS

Howard G. Allen, Niagara Falls, N. Y., assignor to Consolidated Packaging Machinery Corporation, Buffalo, N. Y., a corporation of New York

Application February 2, 1940, Serial No. 316,938

28 Claims. (Cl. 93—6)



1. The method of closing a filled bag comprising tucking the side walls of the unfilled mouth portion of a bag inwardly between the front and rear walls of said mouth portion, collapsing said front and rear walls upon said inwardly tucked side walls, and inserting adhesive between the opposed inner edges of said collapsed bag mouth to seal said mouth in closed position.

2,310,383

MINERAL FORTIFICATION OF FOODSTUFFS AND MEDICINAL PRODUCTS

John S. Andrews, St. Paul, and Lacey H. Evans and Louis J. Huber, Minneapolis, Minn., assignors to General Mills, Inc., a corporation of Delaware

No Drawing. Application April 16, 1941, Serial No. 388,816

15 Claims. (Cl. 99—163)

1. A composition of matter comprising a material selected from the group consisting of foods and medicines which are adversely affected by the presence of an ionizable compound of a metal selected from the group consisting of copper, manganese and iron; admixed with a non-ionized phytate of a metal of said group.

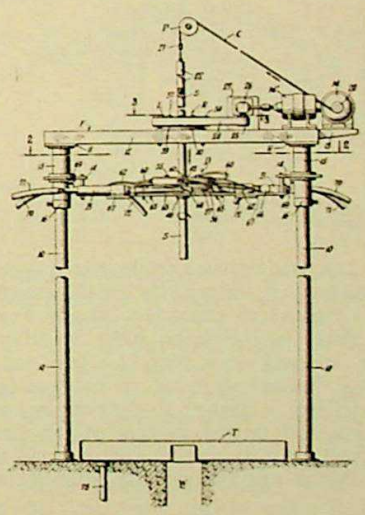
2,310,384

APPARATUS FOR TREATING METAL ARTICLES

Roman F. Arnoldy, Houston, Tex., assignor to The Linde Air Products Company, a corporation of Ohio

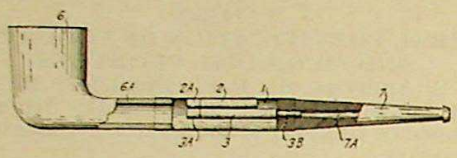
Application August 2, 1940, Serial No. 349,456

8 Claims. (Cl. 266—4)



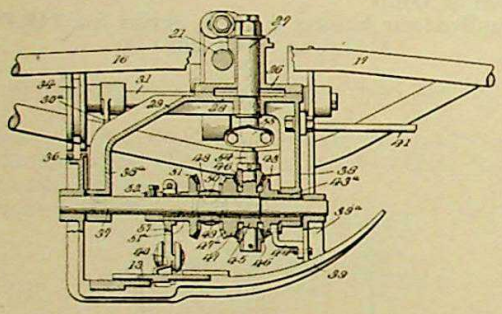
1. Apparatus for treating a cylindrical surface of a metal article comprising means for suspending said article from a point at or adjacent the upper end thereof so that the axis of said surface is disposed substantially vertically and so that said article is relatively freely rotatable about said axis; a device for treating a limited vertical portion of said surface; a guiding bushing disposed above and a guiding bushing disposed below and closely adjacent said device, for maintaining said article in substantially exact alignment during treatment; means for rotating said article about said axis, said rotating means comprising a rotatable drive collar provided with a plurality of rollers each mounted for rotation about a horizontal axis and engaging said article at spaced circumferential points above said treating device; and means for effecting a relative vertical movement between said article and said treating device so as to treat successive vertical portions of said surface.

2,310,385
SMOKING PIPE
Otto Bastiansen, Woodhaven, N. Y.
Application October 19, 1940, Serial No. 361,865
3 Claims. (Cl. 131—212)



3. In a pipe having a smoke chamber and communicating duct, a material trap comprising a plurality of intercommunicating tubes in said chamber, one of said tubes being longer than the other and extending into said duct, and a cap for closing an end of each tube, said caps being interconnected for ease of replacement and removal.

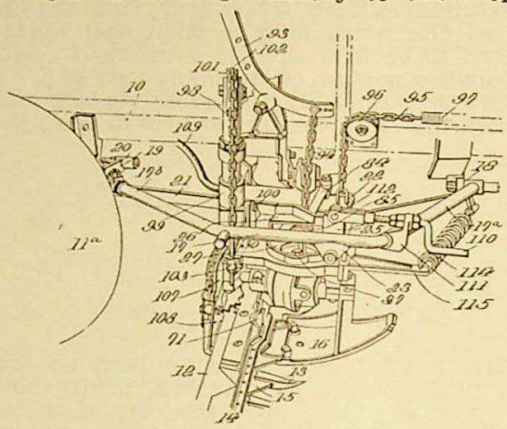
2,310,386
POWER TRANSMITTING MECHANISM
John Insley Blair and Herbert Imbt, Stroudsburg, Pa., assignors to Worthington Mower Company, Stroudsburg, Pa., a corporation of Delaware
Application September 14, 1939, Serial No. 294,956
19 Claims. (Cl. 74—25)



1. Power transmitting mechanism comprising a driving member, a normally stationary shaft, a bevel gear mounted on said shaft for angular movement relative thereto and having opposite bevel faces, means associated with said driving member and engaging one of said faces for oscillating said bevel gear, a driven member, and means interposed between the other face of said bevel gear and said driven member and supported by said shaft for operating the said driven member.

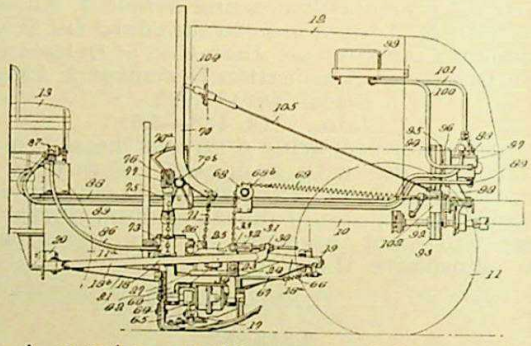
2,310,387
MOWING MACHINE
John Insley Blair and Herbert Imbt, Stroudsburg, Pa., assignors to Worthington Mower Company, Stroudsburg, Pa., a corporation of Delaware
Application June 22, 1940, Serial No. 341,954
13 Claims. (Cl. 56—25)

1. A mowing machine comprising a vehicle, a frame structure carried by said vehicle, a supporting shaft carried by said frame structure and fixed against rotation relative thereto, a plurality of intermeshing gears carried by said supporting shaft, a shoe rotatably mounted on said supporting shaft and having a bevel gear fixed thereto and rotatable with said shoe in relation to said frame structure, a sickle bar carried by said shoe and operable by said gears, a housing oscillatable with respect to said supporting shaft and said bevel gear and inclosing the said gears to prevent damage thereto, a pinion gear carried by said housing in mesh with said bevel gear and one of said intermeshing gears, and means for oscillating said housing whereby to effect opera-



tion of the sickle bar through said intermeshing gears.

2,310,388
MOWING MACHINE
John Insley Blair, Stroudsburg, Pa., assignor to Worthington Mower Company, Stroudsburg, Pa., a corporation of Delaware
Application August 2, 1940, Serial No. 349,503
9 Claims. (Cl. 56—25)

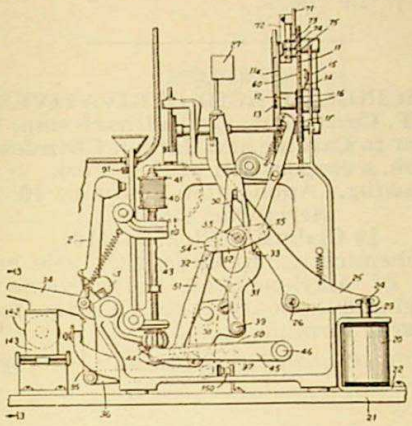


1. A mowing machine comprising a vehicle adapted to carry a sickle bar, a frame extending outwardly from the vehicle and pivotally connected thereto for limited substantially vertical movement, a supporting member having pivot means extending longitudinally of the vehicle for supporting the sickle bar for angular adjustment, and connected to said frame for substantially horizontal pivotal movement to permit safety swing back of the sickle bar, flexible connecting means between the sickle bar and said supporting member, and hydraulic piston means carried by the supporting member and cooperating with said connecting means to control angular adjustment of the sickle bar about said pivot means.

2,310,389
TIME RECORDER
Robert T. Blakely, Ridgewood, N. J., assignor to International Business Machines Corporation, New York, N. Y., a corporation of New York
Application March 13, 1940, Serial No. 323,651
19 Claims. (Cl. 234—43)

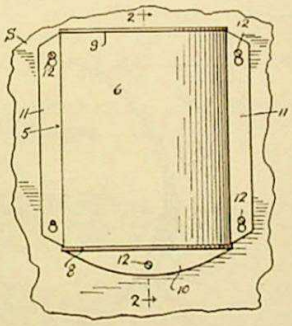
18. In a time recorder, time-controlled recording elements to record time records on cards bearing schedule selecting designations and insertable one at a time, a plurality of time-controlled scheduling devices, means controlled selectively by said devices for effecting selective classification of the time records, and means controlled by a schedule selecting designation of the inserted

card for selecting one of said scheduling devices to act through the first-named means to effect



selective classification of the time record made on the inserted card.

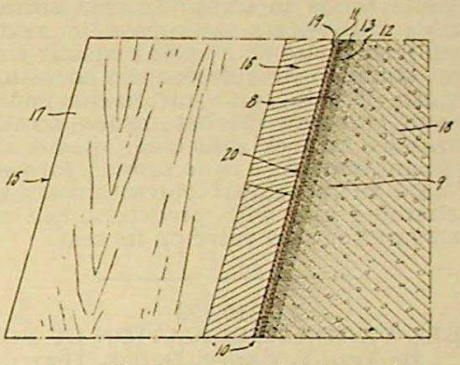
2,310,390
HOLDER FOR BOTTLES, ETC.
Gerald G. Bridges and Selby A. Miller, Jr. Greensburg, Ind.
Application March 8, 1940, Serial No. 323,050
1 Claim. (Cl. 220—18)



A combination wall bracket and receptacle comprising a bracket having a straight side provided with a downwardly extending flange adapted to be fixed against a wall, said bracket having a horizontal portion extending from the top of said flange and provided with a trough-like seat extending around the free edge of said horizontal portion, and a semi-cylindrical receptacle body conforming in plan to the horizontal body portion and having its lower edge normally seated in said trough-like seat, said receptacle being provided at its side edges with outwardly extending flanges adapted to lie flat against said wall and provided with keyhole slots adapted to engage on studs projecting from said wall.

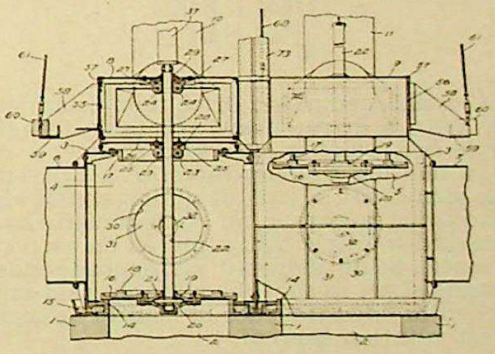
2,310,391
ABSORPTIVE MOLD LINING
Arthur E. Brooks, Nutley, and Byron W. Bender, Wanaque, N. J., assignors to United States Rubber Company, New York, N. Y., a corporation of New Jersey
Application June 28, 1941, Serial No. 400,238
15 Claims. (Cl. 25—122)

1. A lining for concrete forms and the like, comprising a body layer formed in part at least of highly absorbent material, a layer of porous fabric material, substantially non-adherent to concrete, and a bonding medium between said layers for uniting said layers, said bonding medium being insoluble in water and possessing such porosity that air and moisture may pass readily through the medium from the fabric ma-



terial to an adjacent absorbent surface of the body layer.

2,310,392
REVERSING MEANS FOR REGENERATIVE FURNACES
Vincent D. Campbell, Rocky Hill, and Charles H. Wise, Hartford, Conn., assignors to Hartford-Empire Company, Hartford, Conn., a corporation of Delaware
Application January 9, 1941, Serial No. 373,736
3 Claims. (Cl. 277—5)



1. A reversing valve for use with a regenerative furnace comprising a valve body having a port adapted to connect with a source of air under pressure, a second port adapted to connect with a regenerative furnace and a third port adapted to connect with a stack, said first port and said third port being located opposite one another in vertically spaced portions of the valve body, a valve seat associated with said first named port, a second valve seat associated with said third port opposite the first valve seat, a valve plate in said valve body having a seating portion on one face thereof arranged to cooperate with one of said valve seats and a seating portion on its opposite face arranged for cooperation with the other of said valve seats, a substantially vertically disposed, non-circular stem for said valve plate, a loose, self-centering connection between said stem and its associated valve plate, at least two pairs of rollers for guiding said valve stems, means mounting each of said rollers for adjustment in two directions at right angles to one another to provide for the adjustment of said valve stem for centering said valve plate in respect to its seat, cable means for operating said valve stem and including a sprocket chain portion, a sprocket about which said sprocket chain portion passes, means associated with said sprocket for moving it to move said chain and hence to move said valve plate in opposite directions, spring means interposed in said cable means intermediate said sprocket chain portion and said valve stem, said spring means including a piston

and cylinder and springs therebetween so constructed and arranged that the weight of said valve plate tends to compress said springs, an adjustable turnbuckle interposed in said cable means intermediate said spring means and said sprocket chain to provide for the adjustment of the length of said cable means for said valve plate, and two-way ratchet means constructed and arranged to lock said cable means at each end of its movement so as to provide for the seating of said valve against opposite seats in said valve chamber and with predetermined adjustable pressure for said valve on its seat.

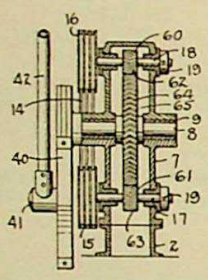
2,310,393

DOUBLE PINION APPLICATION OF POWER

De Vere V. Carter, Dallas, Tex.

Application July 29, 1937, Serial No. 156,380

5 Claims. (Cl. 74—410)



1. A double reduction drive unit comprising a power unit, a drive sheave rotatable thereby, a multiple belt passing over said sheave, a crank shaft, a housing support therefor, a drive member on said shaft, a pair of pinion shafts also in said housing, a sheave on each pinion shaft to receive said multiple belt, a pinion on each shaft, said shafts being disposed on opposite sides of said crank shaft so that the power of said pinions is applied to opposite sides of said drive member to effect rotation thereof.

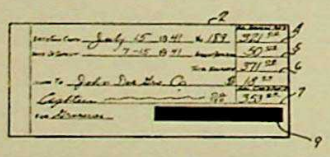
2,310,394

CHECK

Lewis B. Case, St. Louis, Mo.

Application July 21, 1941, Serial No. 403,296

1 Claim. (Cl. 282—8)



In combination, a check blank and a stub blank positioned beneath said check blank, said check and stub blanks being adapted for the insertion of carbon paper therebetween, said check and stub blanks being provided with registering, designated spaces to permit of simultaneously drawing said check and recording same on said stub, and said stub having means consisting of vertical and horizontal lines forming boxed-in spaces for computing balances after said check has been drawn and a deposit made so that said balances will appear on said stub only but not on said check, and said stub having a solidly inked-in area to prevent the signature from being reproduced thereon when said signature is written on said check, and said check having diagonal lines extending from the upper left-hand corner to the lower right-hand corner adapted to direct the eye progressively from the first to the last of the items written on the check.

2,310,395

RICINOLEIC ACID DERIVATIVES

Thomas F. Carruthers, South Charleston, W. Va., assignor to Carbide and Carbon Chemicals Corporation, a corporation of New York

No Drawing. Application February 16, 1939, Serial No. 256,725

10 Claims. (Cl. 260—410)

1. As chemical compounds, ricinoleic acid derivatives of alkylene and polyalkylene glycol monoalkyl and monoaryl ethers having the probable general formula

$$CH_3.(CH_2)_5.CH(\overset{\overset{\displaystyle O}{\|}}{O}.R_1).CH_2.CH{:}CH.(CH_2)_7.COO.(C_2H_4O)_nR$$

in which n is a small whole number, R is of the group consisting of alkyl and aryl radicals and R_1 is a monovalent acyl group.

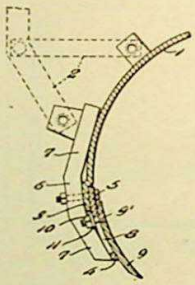
2,310,396

GRADER BLADE

Austin B. Clinkscales, Jr., Greenville, Miss.

Application April 10, 1942, Serial No. 438,483

2 Claims. (Cl. 37—143)



1. A grader blade of the character described comprising a moldboard including a rearwardly offset lower marginal portion, a plate secured in said offset portion of the moldboard and depending therefrom, the lower portion of said plate having vertical slots therein and further having staggered vertical series of openings therein, blades mounted on the plate and depending therefrom, securing bolts on the blades operable in the slots, additional bolts on the blades engageable selectively in the openings, and retaining nuts threaded on the bolts and engaged with the plate, said bolts constituting means for adjustably and removably securing the blades in position on the plate.

2,310,397

METHOD OF PACKING WELLS

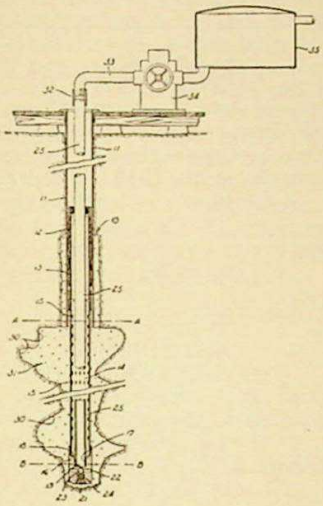
Clarence J. Coberly, Los Angeles, Calif., assignor to Kobe, Inc., Huntington Park, Calif., a corporation of California

Original application January 24, 1938, Serial No. 186,597. Divided and this application February 10, 1940, Serial No. 318,300

7 Claims. (Cl. 166—26)

1. A method of removing sand grains from the production flow of a well, including the steps of: forming a single classified body of discrete particles in which the diameters of the largest particles are approximately thirteen times the size of the sand grains in the well at the ten per-

centile; disposing said body of discrete particles in the well in the path of the production flow



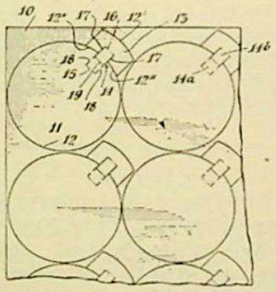
therefrom; and passing said production flow through said body of discrete particles.

2,310,398

COVER CONSTRUCTION

Arthur E. Cole, West Haven, Conn., assignor, by mesne assignments, to Carton Development Corporation, New York, N. Y., a corporation of Delaware

Application September 16, 1940, Serial No. 356,905
8 Claims. (Cl. 229—43)



1. A paperboard closure disc having a periphery adapted to seat under an inturned lip associated with a container body, said disc including a main disc portion, a complementary closure portion extensible beyond the periphery of said main disc portion, and a pull-up tab defined by a pair of cut lines extending from the periphery of said main disc portion a distance inwardly thereof and a pair of cut lines extending from an edge of said complementary closure portion a distance inwardly thereof, one end of said tab portion being integrally joined to said main disc portion and the other end being integrally joined to said complementary closure portion.

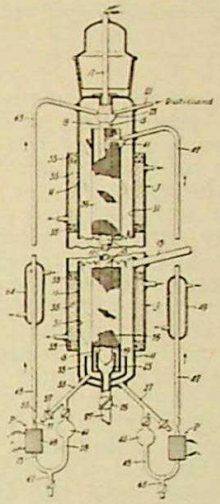
2,310,399

DISTILLATION PROCESS AND APPARATUS

Henry L. Cox and Argyle C. Plewes, South Charleston, W. Va., assignors to Carbide and Carbon Chemicals Corporation, a corporation of New York

Application September 10, 1940, Serial No. 356,156
15 Claims. (Cl. 202—52)

9. Vacuum distillation apparatus comprising, in combination, within a substantially closed chamber, a substantially vertical vaporizing surface and a substantially vertical condensing surface in closely spaced relation; means for heating said vaporizing surface; means for cooling said condensing surface; means for introducing distilland onto said vaporizing surface; means for removing undistilled residue from said vaporizing surface; a substantially vertical foraminous member disposed between and spaced from said vaporizing and said condensing surfaces; means for distributing a selected portion of a



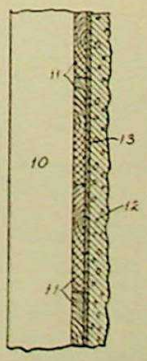
liquid condensate from said condensing surface upon the upper margin of said foraminous member; means for withdrawing the remaining portion of said liquid condensate from said chamber; means for conducting to said vaporizing surface a selected portion of the liquid flowing from the lower margin of said foraminous member; means for withdrawing the remainder of said last-named liquid from said chamber; and evacuating means for removing residual gases from said chamber.

2,310,400

FORM LINER

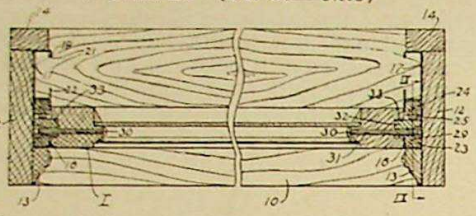
Clayton O. Crane and Patrick J. Mulligan, Denver, Colo., assignors, by direct and mesne assignments, to United States Rubber Company, New York, N. Y., a corporation of New Jersey

Application January 18, 1940, Serial No. 314,488
10 Claims. (Cl. 25—122)



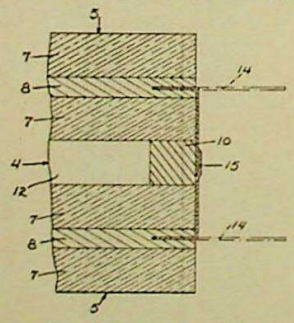
1. A face liner for concrete and similar forms, comprising wood pulp in the form of water-absorptive, air-permeable sheets flexible to lie smoothly against and conform with the moulding face of a form, and a water-absorptive, air-permeable surface substantially non-adherent to concrete on one side of said sheets.

2,310,401
WINDOW STRUCTURE
Owen L. Dautrick, Ferndale, and Stewart J. Dautrick, Detroit, Mich.
Application February 27, 1941, Serial No. 380,786
2 Claims. (Cl. 20—52.3)



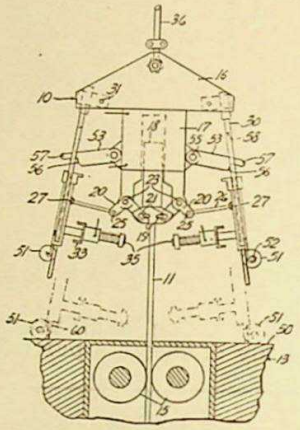
1. In a window frame having outer and inner stops at each side, a pair of sheet metal guide channels at each side of the frame extending from the top to the bottom thereof and held laterally by the frame inner and outer stops, said channels along their outer edges having each inwardly directed retaining flanges, a slider element in each channel confined therein by the retaining flanges of the channel and having sliding movement in the channel longitudinally thereof, friction means for each slider element tending to hold it in any position in the respective channel, an inner window sash between opposed channels and having tongue and groove connection with the slider elements in said channels, an outer sash between the opposed other channels and having tongue and groove connection with the slider elements in said channels and having detachable means for securing it to said slider elements, the frictional engagement of said slider elements in the channels being sufficient to hold the respective sash in any position thereof in the frame whereby, after movement of a sash with the slider elements therefor to one end of said frame and subsequent release of the securing means, the slider elements will remain at such end of the frame and the sash may be moved toward the other end of the frame away from the slider elements for bodily removal of the sash from the frame.

2,310,402
GLASS INSULATION UNIT
Brook J. Dennison, Aspinwall, Pa., assignor to Pittsburgh Plate Glass Company, Allegheny County, Pa., a corporation of Pennsylvania
Application February 28, 1941, Serial No. 381,059
2 Claims. (Cl. 20—56.5)



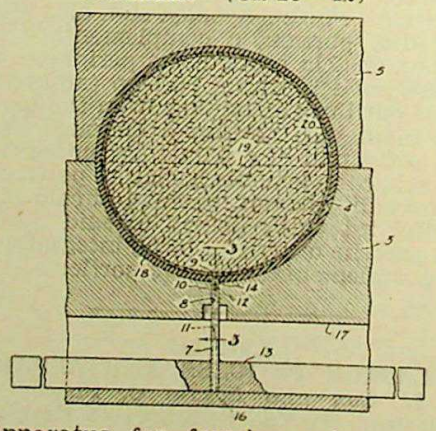
1. In a glass insulation structure, a plurality of laminated glass units each having a resinous interlayer, a flexible metal strip partially embedded in the interlayer between the glass plates of each unit and extending beyond the edges thereof, and a spacer interposed between the laminated units adjacent the edges thereof to form a chamber between said units, the metal strips having their outer portions disposed in bridging relation across the space between the edges of the laminated units and being integrally connected to form a sealing vapor barrier around the glass edges.

2,310,403
CUTOFF DEVICE
Charles Dice, Mount Vernon, Ohio, assignor to Pittsburgh Plate Glass Company, Allegheny County, Pa., a corporation of Pennsylvania
Application June 29, 1940, Serial No. 343,203
8 Claims. (Cl. 49—14)



1. In a cut-off unit for severing sheet glass, a pair of members movable inwardly toward and outwardly away from each other for clamping sheet glass therebetween, a support provided with means pivotally suspending each of said members thereon, locking mechanism mounted on the support and provided with means engagable with the members in response to outward movement of the latter for releasably locking the members in outwardly swung positions, and a device movably mounted on each member and engagable with the locking mechanism to release said members from their outwardly swung positions.

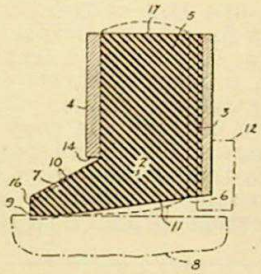
2,310,404
APPARATUS FOR THE PRODUCTION OF MOLDED ARTICLES
Howard M. Dodge, Wabash, Ind., assignor to The General Tire & Rubber Company, Summit, Ohio, a corporation of Ohio
Application July 30, 1940, Serial No. 348,400
4 Claims. (Cl. 18—42)



3. Apparatus for forming spherical articles with relatively impervious molded rubber-like surface envelope, comprising a mold with a spherical cavity therein, an opening in the wall of said cavity, said opening having a countersunk frusto-conical sealing surface adjacent its

juncture with the surface of said cavity, a movable pin having a relatively bluntly pointed conical end and a body portion with a passageway for the passage of gas to the exterior of said mold, said passageway extending longitudinally of said body portion and having an entranceway near said point, a frusto-conical sealing face disposed between said opening and said point, said face being adapted to cooperate with said sealing surface adjacent said opening to control the passage of gas through said passageway and through said opening, means available from the exterior of said mold for changing the protrusion of said pin into said cavity and for controlling the passage of gas through said opening.

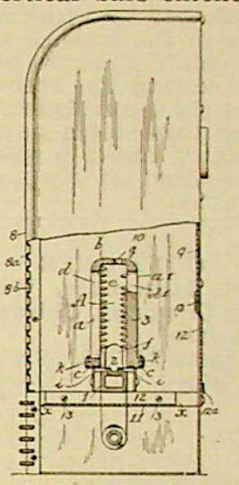
2,310,405
OIL SEAL
Howard M. Dodge, Wabash, Ind., assignor to The General Tire & Rubber Company, Summit, Ohio, a corporation of Ohio
Application September 19, 1940, Serial No. 357,427
1 Claim. (Cl. 288—2)



A fluid seal for sealing a space between relatively movable members, comprising an annular molded sealing element of a deformable synthetic rubber compound, which sealing element has an annular deformable body portion, a preformed laterally extending, annular flangelike frusto-conical sealing lip and substantially non-expansible annular metal supporting members adhesively attached to said body portion and enclosing the sides of said body portion, the outer periphery of said body portion being free to move radially and enlarge its diameter to expand and form a seal against one of said relatively movable members when pressure is applied to said supporting members, each of said supporting members having an opening, said lip extending beyond the plane of said body portion and protruding through and beyond the registering opening of one of said annular supporting members, whereby movement of the supporting members toward each other causes inward radial movement of the sealing lip.

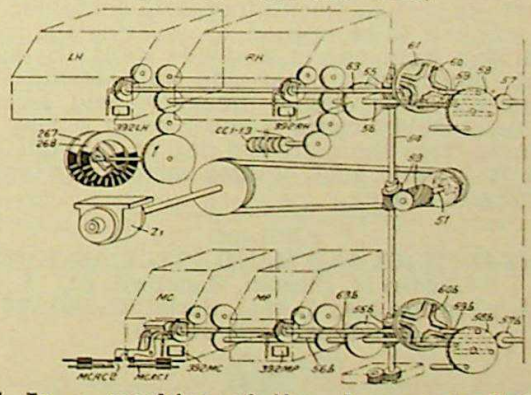
2,310,406
CERAMIC HEATING ELEMENT AND GAS HEATER EMBODYING THE SAME
Roy A. Dudley, Huntington, W. Va., assignor to Armstrong Products Corporation, Huntington, W. Va., a corporation of West Virginia
Application July 26, 1939, Serial No. 286,711
1 Claim. (Cl. 126—92)

A hollow, open bottom ceramic radiant element of general parallelepipedon form comprising a front wall made up mainly of vertically extending spaced apart bars connected at their lower ends to a base portion which has a horizontal flange extending forwardly beyond the vertical plane in which said bars lie, said flange having an exposed upper face, said element having a rear wall with a horizontally extending flange at the rear face of the base portion thereof in substantially the same horizontal plane with the forwardly extending flange first mentioned and with an exposed upper face, said element having substantially parallel end walls and a top wall, the upper ends of the vertically extending bars being connected to the said top wall, the spaces between the vertical bars extending each clear



from the flanged front base portion to the said top wall for the uninterrupted flow of hot products upwardly and forwardly, a burner and supporting means embracing said flanges, contacting the base and holding the element spaced apart from and above the burner, substantially as described.

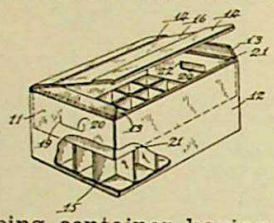
2,310,407
MACHINE FOR CHECKING QUOTIENT RESULTS
Stephen W. Dunwell, Endicott, and John N. Wheeler, Hawthorne, N. Y., assignors to International Business Machines Corporation, New York, N. Y., a corporation of New York
Application April 28, 1942, Serial No. 440,824
7 Claims. (Cl. 235—61.8)



1. In a machine of the class controlled by cards designating divisor and dividend amounts and a related quotient result amount, a plurality of receiving means each for receiving a respective divisor and quotient amount from a card, means for entering a unit in the quotient receiving means to augment the quotient amount by a unit, an accumulator, multiplying means under control of said divisor receiving means and said quotient receiving means for effecting after the latter has received the unit entry the multiplication of the divisor amount and augmented quotient amount and for entering the product in said accumulator, card controlled means for subtractively entering the dividend amount in said accumulator to obtain a balance amount of the product amount and the sub-

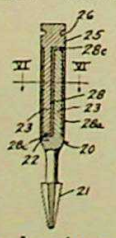
tracted dividend amount, means operative thereafter for testing said accumulator for ascertaining whether the accumulator now represents a positive condition and means controlled thereby and set when a positive condition is ascertained, means operative after the test for a positive condition has been completed for subtracting under control of the divisor receiving means said divisor amount from the balance amount in said accumulator to obtain a second balance amount, means for then testing the accumulator to determine whether the second balance amount represented thereon indicates a negative condition of said accumulator, and a supplemental means controlled thereby and set when a negative condition is ascertained.

2,310,408
CONTAINER
Louis Ehrenfeld, Milwaukee, Wis., assignor to Pabst Brewing Company, Chicago, Ill., a corporation of Delaware
Application August 31, 1939, Serial No. 292,757
4 Claims. (Cl. 229—37)



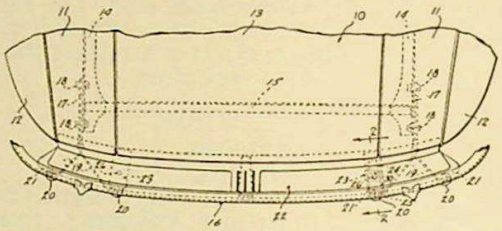
1. A shipping container having end and side walls provided with foldable marginal flaps on the upper edges thereof, a closure member comprising a single flat sheet adapted to rest on the inwardly folded marginal flaps of said end walls, locking means depending from said closure member in spaced relation to the edges thereof for engaging an edge of the marginal flap on one of said end walls to prevent endwise movement of said closure member, said marginal flaps on said side walls being folded over the upper surface of said closure member and secured thereto to seal said container, said container being adapted to be opened by severing the marginal flap from one of said side walls, the marginal flap on said other side wall serving as a hinge for said closure member, said locking means on said closure member being readily releasable from the marginal flap on said one end wall to permit said closure member to swing about said hinge.

2,310,409
DENTAL BURR AND HAND-PIECE ASSEMBLY
Martin M. Ellman, Rockford, Ill.
Application May 7, 1941, Serial No. 392,208
2 Claims. (Cl. 32—58)



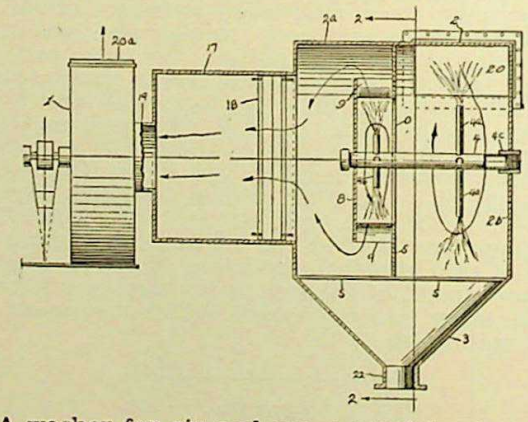
1. A dental burr having a split half-lapped shank portion and a molded plastic separating member for said split shank position, said separating member having an outer wall embracing the lapped portions of said shank, a longitudinally extending wall within said outer wall and interposed between the opposed lapping surfaces of said split shank, and end walls between said longitudinally extending wall and the outer wall, said end walls being at opposite ends of said separating member and interposed between adjacent end walls of said split shank portions.

2,310,410
MOTOR VEHICLE
James R. Ferguson, Royal Oak, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a corporation of Michigan
Application February 6, 1941, Serial No. 377,602
3 Claims. (Cl. 293—55)



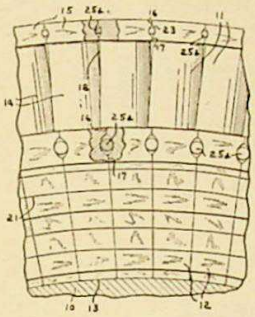
1. In a vehicle, the combination with a body carrying frame and a bumper secured to and having a transversely extending impact bar spaced beyond one end of the body, a pair of spaced brackets fixed to the impact bar and extending toward the body, a carrier member seated on each bracket, a sheet stone deflector fixed to the carrier members and extending across the space between the body and the impact bar, and means loosely anchoring said carrier members to the brackets whereby the frame and bumper can move relatively a limited extent in any direction without distorting the stone deflector.

2,310,411
AIR AND GAS WASHER
Ernest F. Fisher, Passaic, N. J.
Original application November 27, 1940, Serial No. 367,312. Divided and this application December 10, 1940, Serial No. 369,388
1 Claim. (Cl. 261—79)



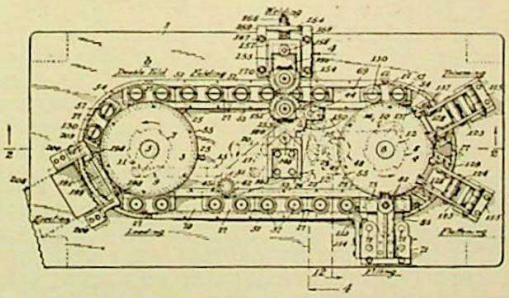
A washer for air and gas, comprising in combination a horizontally disposed casing, a ring diaphragm having a large central opening therein, in said casing, dividing it into a first chamber and a second chamber, tangential air inlet means in said first chamber, stationary means for spraying liquid radially outwardly into the gas swirling in said first chamber, a disk baffle larger than the opening in the ring diaphragm and fixed in said second chamber directly opposite to and spaced from the opening in the ring diaphragm, angularly placed, stationary swirling vanes positioned between the outer part of said disk baffle and the inner part of said ring diaphragm, and means for spraying liquid radially outwardly in all directions into and through said swirling vanes.

2,310,412
VIBRATION DAMPENER
Warren B. Flanders, Philadelphia, Pa., assignor to Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa., a corporation of Pennsylvania
Application March 8, 1941, Serial No. 382,324
3 Claims. (Cl. 253—77)



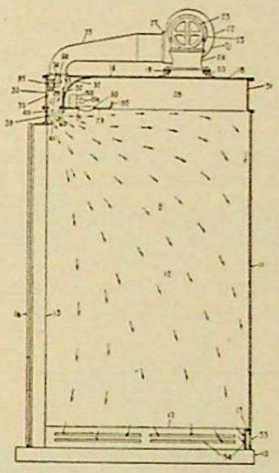
1. In a turbine, a row of moving blades having adjacent surfaces, means providing openings extending transversely of the blades and formed by complementary grooves in the adjacent blade surfaces, each of said openings having a section which is elongated radially of the blade row, pins in the openings, each pin and each opening converging outwardly so that centrifugal force exerted on the pin causes the latter to be wedged frictionally against the adjacent blade surfaces.

2,310,413
COLLAPSIBLE TUBE FILLING AND SEALING MACHINE
John H. Fridén, Maplewood, N. J., assignor to The Sun Tube Corporation, Hillside, N. J., a corporation of New Jersey
Application August 2, 1940, Serial No. 349,848
8 Claims. (Cl. 226—75)



1. In apparatus for filling and sealing collapsible metal tubes, filling means, welding means, ejecting means, and means for conveying tubes successively to and beyond the stations of operation of the filling, welding and ejecting means, the filling and ejecting means arranged to operate during pauses in the forward movement of the tubes and the welding means arranged to operate during forward movement of the tubes, the conveying means comprising conveyor blocks arranged to support tubes in position to be operated upon and a pair of intermittently rotatable members, one of which is arranged to engage the blocks before they reach the filling station and the other of which is arranged to engage the blocks before they reach the ejecting station, the welding station being arranged between the filling and ejecting stations, the conveying means also comprising a third rotatable member arranged to engage each of the blocks in turn and to advance them at a substantially uniform velocity past the welding station and toward the ejecting station, the pair of intermittently rotatable members arranged to impart to the blocks an average velocity substantially equal to the uniform velocity imparted by the third rotatable member.

2,310,414
ELEVATOR CAR
Harry Emil Fritzam, Jamaica, and Morrison John Brounn, Forest Hills, N. Y., assignors to Otis Elevator Company, New York, N. Y., a corporation of New Jersey
Application October 1, 1940, Serial No. 359,210
1 Claim. (Cl. 98—33)



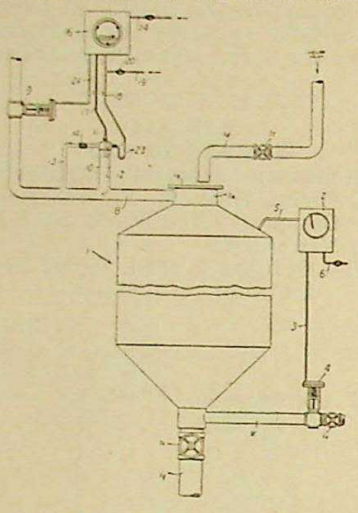
An elevator car carrying a blower mounted above the car ceiling for supplying air to provide ventilation, said car comprising, a plate extending across the front of the car and curving downward from the ceiling of the car in spaced relation to the front wall of the car to form a plenum chamber, the ceiling of the car above said chamber having an opening to form an air inlet which is connected to said blower, a plurality of arcuate brackets secured to said front wall of the car immediately below said chamber and in spaced relation across the front of the car, and means secured to said brackets forming a convex surface extending across the front of the car and provided with elongated openings for directing air from said chamber into the car, said car having vents around the bottom thereof forming outlets for air from the car.

2,310,415
METHOD OF AND APPARATUS FOR CONTROLLING DIGESTERS
Webster W. Frymoyer, Foxboro, Mass., assignor to The Foxboro Company, Foxboro, Mass., a corporation of Massachusetts
Application December 1, 1938, Serial No. 243,333
18 Claims. (Cl. 92—7)

2. Method of controlling the gas release from a pulp cooking digester, comprising, continually releasing air from the vapor space of the digester in accordance with the difference between the total pressure in the digester and the vapor pressure of water at the initial condensing temperature of the gases in said vapor space.

9. In apparatus for controlling the removal of non-aqueous gases from the vapor space of a digester through a pressure relief line, the com-

bination of, a condensing chamber connected to the said relief line, means responsive to the temperature within the said condensing chamber, means responsive to the pressure in the said relief line, means for continuously subtracting the po-



sition of the said temperature-responsive means from the position of said pressure-responsive means to obtain a difference, and means for regulating the flow of vapors through said relief line in response to variations in the value of said difference.

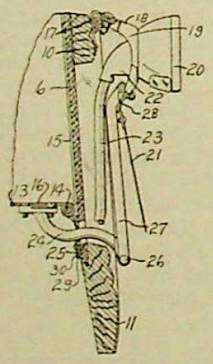
2,310,416

BRACKET

Joseph Galamb, Detroit, Mich., assignor to Ford Motor Company, Dearborn, Mich., a corporation of Delaware

Application April 14, 1941, Serial No. 388,557

2 Claims. (Cl. 296—57)



1. In combination, in a motor vehicle, a body including a floor member and a solid tail gate, said tail gate being hingedly secured to said floor member intermediate the top and bottom of said gate, a combined rear light and license plate bracket hingedly secured to the outer face of said tail gate above said hinge, a link bracket fixedly secured to the underside of said floor member adjacent said hinge, said link bracket extending downwardly and outwardly from said floor member and transversing said tail gate, and a link pivotally secured to the lower end of said bracket and to the outer end of said link bracket, whereby operation of said tail gate causes the said rear light and license bracket to occupy successive substantially parallel planes and whereby said rear light and license plate is maintained in visible position in any position of said tail gate.

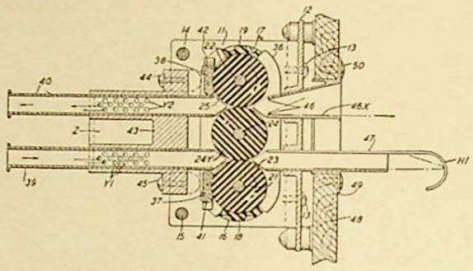
2,310,417

PNEUMATIC TICKET SENDING AND RECEIVING VALVE

Edgar W. Gent, Morristown, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York

Application January 28, 1942, Serial No. 428,559

6 Claims. (Cl. 302—2)



1. A combined ticket sending and receiving pneumatic valve comprising a motor, a roller operatively connected to said motor, other rollers rotated by the movement of the first-mentioned rollers, pneumatic tube sections, one of said sections leading the receiving ticket to the engaged point of the first with one of the second-mentioned rollers, the other of said sections receiving the sending ticket following its movement by the operation of the first-mentioned roller and the other of said rollers, and means forming air seals between said rollers and one side of each of said tube sections.

2,310,418

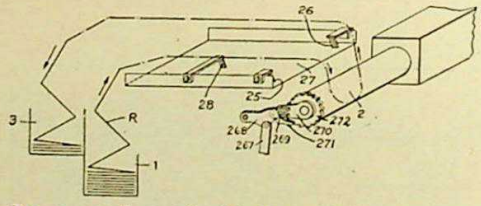
PAPER FEEDING DEVICE

Ioyno Ghertzmann, Saint Mande, France, assignor to International Business Machines Corporation, New York, N. Y., a corporation of New York

Application September 24, 1936, Serial No. 102,279

In France November 6, 1935

18 Claims. (Cl. 235—61.7)



2. In a card controlled machine with an accumulator item and total printing mechanism for printing items and progressive totals on a record strip divided into forms with control indicia, card feeding mechanism and total taking devices, the combination of means for line spacing said strip after each item printing operation, means for sensing said indicia, means under control of said sensing means for suspending operation of said card feeding mechanism, calling said total taking devices into operation and initiating operation of said total printing mechanism to print a progressive total at the bottom of a form, means for feeding said record strip, and means under control of said total printing devices for calling said strip feeding means into operation after printing has occurred.

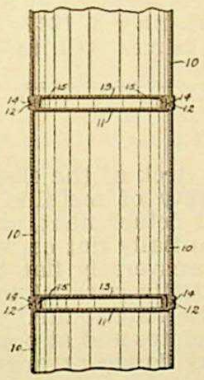
11. In a machine for printing on a record sheet having feed control start and stop indicia, the combination of devices for feeding said sheet, means for spacing said sheet between printing operations, means for sensing a start control indicium, means under control of said sensing means for initiating operation of said feeding devices, other means for sensing said stop con-

trol indicium, and means under control of said other sensing means for terminating the operation of the feeding devices to stop the sheet after it has moved a predetermined distance.

2,310,419
VARNISH
Wells W. Ginn, Cincinnati, Ohio, assignor, by mesne assignments, to Chemical Novelties Corporation, Cincinnati, Ohio, a corporation of Ohio
No Drawing. Application October 17, 1941, Serial No. 415,488
6 Claims. (Cl. 106—250)

2. The process which comprises cooking an oil comprised predominantly of oiticica oil in the presence of approximately ⅛ of 1% to 2½% of castor oil.

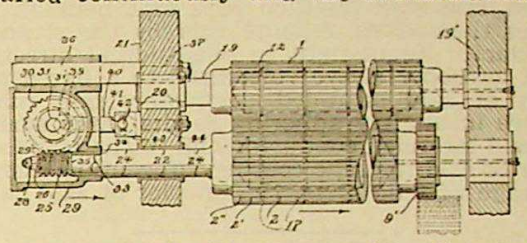
2,310,420
CONTAINER
Duncan Earl Graham, Denver, Colo.
Application October 30, 1939, Serial No. 302,009
2 Claims. (Cl. 220—97)



1. In a container having a tubular straight-walled body and top and bottom end closures, each comprising a circular web portion positioned inwardly of the end edges of the body of said container and formed with an axially offset rim defining an annular channel disposed to telescopically receive one end of the container body and engage therewith to position its web portion in recessed relation interiorly of the container end closed thereby, means on the bottom end closure for limiting lateral displacement between stacked containers of like size, said means comprising an annulus formed by folding said web upon itself closely adjacent the junction of said web portion with its channeled rim in concentric relation with and in axial extension outwardly of the container beyond said rim, said annular member being received within the offset rim portion of the top of the next adjacent container and contacting the web thereof with the aforesaid outer rim portion in substantially contacting relation.

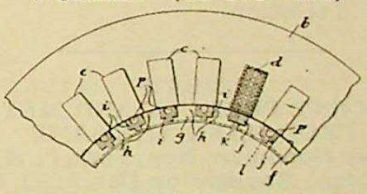
2,310,421
CORRUGATOR
Henry B. Greenwood, Glen Arm, Md., assignor to F. X. Hooper Company, Inc., Glen Arm, Md., a corporation of Maryland
Application September 1, 1939, Serial No. 292,994
6 Claims. (Cl. 154—30)

1. In a corrugating machine, having a plurality of cooperating corrugator rollers, one of said rollers having peripherally arranged stripper grooves, and both said rollers having intermeshing longitudinally extending teeth at right angles to said stripper grooves, and automatic means for applying to one said corrugator roller a reciprocating motion in the direction of its axis and relatively to the other said roller whereby the area of registration of the grooves in the one roller, with the teeth of the other roller at the corrugating area is varied continuously and the accumulation of



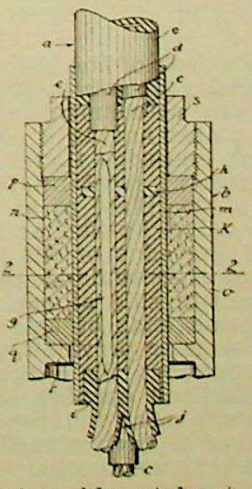
adhesive on the teeth of one said roller in the area registering with the said grooves in the other said roller is prevented, said means for applying a reciprocating motion comprising a reducing gear and a continuously running power actuated driving connection therefor.

2,310,422
DYNAMOELECTRIC MACHINE
Richard Gold, Birmingham, England
Application October 25, 1940, Serial No. 362,845
In Great Britain October 26, 1939
5 Claims. (Cl. 171—252)



1. In a dynamo-electric machine in combination a laminated annular pole piece, having a cylindrical bore and being slotted around its inner periphery to receive the stator windings, a thin tubular lining fitted within said bore of the pole piece, an inner hollow expansible cylindrical securing member arranged within said lining for supporting the same internally, and means holding said securing member in expanded state pressed against said lining.

2,310,423
MEANS FOR PREVENTING LEAKAGE OF FLUID THROUGH ELECTRIC CABLES
Richard Gold, Birmingham, England
Application October 25, 1940, Serial No. 362,847
In Great Britain October 26, 1939
8 Claims. (Cl. 174—77)



3. In an electric cable, at least one stranded

metallic conductor, the inner wires of which are, at least partly, removed, a rigid metallic core arranged within said stranded conductor and replacing said removed inner wires, a metallic coating on said wires and to said rigid core filling the interstices between the non-removed wires and said metallic core and between the wires themselves, making thereby the stranded conductor liquid-tight in longitudinal direction, and a rubber sleeve vulcanized to a bared portion of said stranded conductor, said rubber sleeve intimately adhering to the bared surface of said stranded conductor and to the outer surface of said metallic coating, preventing thereby leakage of fluid along the interior of said cable.

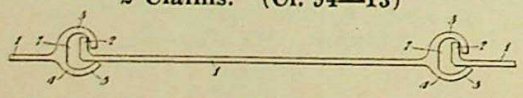
2,310,424
LUMINESCENT COMPOSITION AND METHOD OF PRODUCING THE SAME
Mac Goodman, New York, N. Y.
No Drawing. Application May 23, 1940, Serial No. 336,881
5 Claims. (Cl. 250—81)

1. The process of producing a luminescent composition comprising igniting zinc oxide and sulphur in stoichiometric proportions in a non-oxidizing atmosphere and at a temperature between 1100° C. and 1350° C. to form as an end product crystals of zinc sulphide carrying zinc oxide in solid solution.

2,310,425
LUMINESCENT PRODUCT AND METHOD OF PRODUCING THE SAME
Mac Goodman, New York, N. Y.
No Drawing. Application December 3, 1941, Serial No. 421,489
12 Claims. (Cl. 250—81)

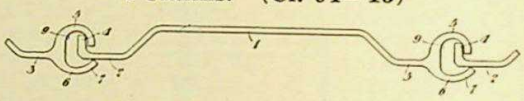
10. A luminescent composition formed through ignition of zinc oxide and sulphur in the presence of minute quantities of a heavy metal salt, and consisting of only zinc sulphide crystals having occluded therein zinc oxide and a heavy metal in solid solution.

2,310,426
PORTABLE DECK
Gerald G. Greulich, Mount Lebanon, Pa., assignor to Carnegie Illinois Steel Corporation, Pittsburgh, Pa., a corporation of New Jersey
Application July 12, 1940, Serial No. 345,217
2 Claims. (Cl. 94—13)



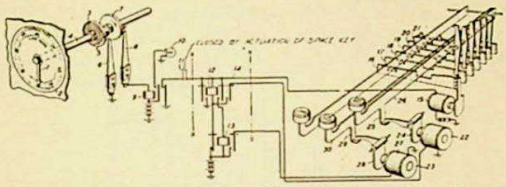
1. A portable deck of the class described comprising a plurality of substantially flat metallic plates for rapid attachment and detachment, each of said plates having a continuous flange arranged along one edge thereof which extends upwardly therefrom substantially perpendicular to the body of the plate so as to form a continuously extending lip-like portion throughout the length of the edge of the plate, a pair of spaced apart continuous flange portions arranged along the opposite side of each of said plates with the extreme ends of said flange portions spaced apart so as to provide a jaw-like portion extending throughout the length of the plate having a constricted opening therebetween for receiving the edge of an adjacent plate, the first mentioned flange of each of said plates adapted to be inserted between the pair of spaced apart flanges of an adjacent plate and the plate adapted to be rotated to a substantially horizontal position so that the flange is in substantially a vertical plane between the pair of flanges after the plate has been rotated and moved to such horizontal and assembled position with the constricted opening between said pair of flanges adapted to prevent the first mentioned flange from passing therethrough when the plates are disposed in a horizontal plane thereby securely locking the plates together and preventing disengagement of the same from each other, the bottom side of one of said plates adapted to rest upon and be supported by the lowermost flange or jaw of said pair of flanges of an adjacent plate at a point adjacent the first mentioned flange and inwardly toward the center of the plate whereby a substantially rigid flat horizontal deck is provided capable of sustaining superposed loads.

2,310,427
PORTABLE DECK
Gerald G. Greulich, Mount Lebanon, Pa., assignor to Carnegie-Illinois Steel Corporation, Pittsburgh, Pa., a corporation of New Jersey
Application September 3, 1941, Serial No. 409,417
2 Claims. (Cl. 94—13)



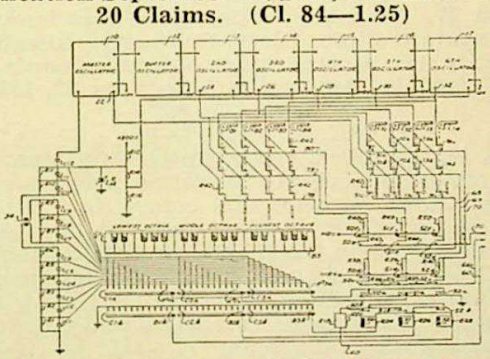
1. A portable deck of the class described comprising a plurality of metallic plates for rapid attachment and detachment, each of said plates having a substantially flat central portion and a substantially transversely flat offset portion arranged substantially parallel to the central flat portion along the longitudinally extending edges of each of said plates and at opposite sides thereof, a continuous flange arranged along the extreme outer edge of one of said offset portions of each of said plates and which extends upwardly therefrom substantially perpendicular thereto and to the body of the plate so as to provide a continuous lip-like portion throughout the length of the edge of the plate, a pair of spaced apart continuous flange portions arranged along the extreme outer edge of the offset portion along the opposite side of each of said plates, so as to provide a jaw-like portion extending throughout the length of the plate having a constricted opening therebetween on the outer side thereof for receiving the edge of an adjacent plate, the first mentioned flange of each of said plates adapted to be inserted between the pair of spaced apart flanges of an adjacent plate, the plate is adapted to be rotated to substantially a horizontal position so that the plate is disposed in substantially a vertical plane between the pair of flanges after the plate has been rotated and moved to such horizontal and assembled position with the constricted opening between said pair of flanges adapted to prevent the first mentioned flange from passing therethrough when the plates are disposed in a horizontal plane, thereby securely locking the plates together and preventing disengagement of the same from each other, the bottom side of the offset portion of one of the plates adapted to rest upon and be supported by the lowermost flange or jaw of the pair of flanges of an adjacent plate at a point adjacent the first mentioned flange and inwardly toward the center of the plate whereby a substantially rigid flat deck is provided capable of sustaining superposed loads with the interlocking means disposed below the main body of the plates so as to provide a substantially continuous even top surface.

2,310,428
AUTOMATIC TELETYPEWRITER OPERATION
John A. Hall, Summit, and James W. Schmied, Madison, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application March 15, 1940, Serial No. 324,100
13 Claims. (Cl. 178—25)



1. A code sender including (*a*) means for sending codes assigned as function codes, (*b*) means for sending codes other than those assigned as function codes, (*c*) conditioning means responsive to a predetermined number of said other codes, and (*d*) means rendered effective by the response of the conditioning means and the sending thereafter of a predetermined said other code for automatically sending a plurality of codes assigned as function codes.

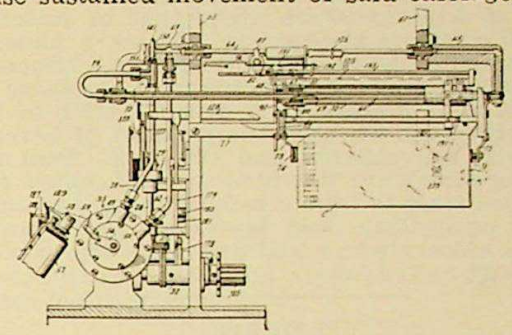
2,310,429
ELECTRICAL MUSICAL INSTRUMENT
John M. Hanert, Wilmette, Ill., assignor to Hammond Instrument Company, Chicago, Ill., a corporation of Delaware
Application September 22, 1941, Serial No. 411,804
20 Claims. (Cl. 84—1.25)



1. In an electrical musical instrument, a variable frequency generating apparatus, a keyboard having a plurality of keys, means controlled by said keys for varying the frequency of operation of said generating apparatus, a plurality of separate output channels for the signals produced by said generating apparatus, separate intensity envelope determining means associated with each of said channels, means controlled by said keys for initiating the operation of said envelope determining means, a signal amplitude controlling means in each of said channels, means under the control of said keys for causing operation of said amplitude controlling means, and a volume control circuit common to all of said channels and operable to affect the amplitude controlling means thereof.

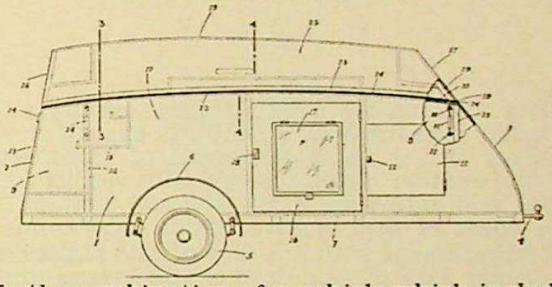
2,310,430
CARRIAGE CONTROL MECHANISM
Robert E. Hart, Poughkeepsie, N. Y., assignor to International Business Machines Corporation, New York, N. Y., a corporation of New York
Application May 2, 1941, Serial No. 391,494
29 Claims. (Cl. 197—67)

28. In a device of the character described, a movable carriage, fluid means for moving said carriage, means controlling said carriage to cause normal intermittent movement thereof, means for disabling said carriage controlling means to cause sustained movement of said carriage, and



means controlled by said disabling means to alter the effect of said fluid means.

2,310,431
TRAILER
Roy E. Hart, Stockton, Calif.
Application July 20, 1940, Serial No. 346,594
1 Claim. (Cl. 296—23)



In the combination of a vehicle which includes a body having a top, a boat disposed in inverted position atop the body and symmetrically engaging the latter about the entire normally upper edge of said boat whereby to prevent access to the interior of the boat when the latter is so disposed, and means releasably connecting the boat and the body; non-communicating compartments in opposite ends of the body, said compartments having normally locked access doors opening thereinto, said last-named means comprising connector units releasably connected between the interior of the boat and the body at points within said compartments, the top having openings through which said units depend, and said units being releasable only from within said compartments and below said top.

2,310,432
COMPOSITE BUILDING UNIT
Elmer H. Haux, Tarentum, Pa., assignor to Pittsburgh Plate Glass Company, Allegheny County, Pa., a corporation of Pennsylvania
Application October 7, 1938, Serial No. 233,769
3 Claims. (Cl. 49—77)

1. A process of forming from crushed vitreous material a bloated cellular body having a moderately expanded relatively dense facing layer and a highly expanded backing layer of low density, which process comprises superposing in a mold a plurality of layers of crushed vitreous material corresponding to the desired layers in said bloated cellular body, the top layer corresponding to the backing layer and containing a relatively large amount of a gassing agent and the bottom layer corresponding to the facing

layer and containing a lesser amount of the gassing agent, said agent being decomposable by heat at a temperature above that of sintering of the vitreous material to liberate a bloating gas, heating the layers in the mold to a temperature above that of sintering and softening of the vitreous material and decomposition of the gassing agent, whereby the particles of vitreous material are cohered and the gases from the gassing agent are liberated in the cohered and softened mass to form a cellulated and expanded body, comprising said layers bonded together into a unitary whole and annealing and cooling the body.

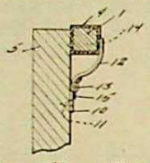
2,310,433

WEATHER STRIP FOR DOORS AND THE LIKE

Thomas Monroe Hester, Hawthorne, Calif.

Application September 25, 1941, Serial No. 412,313

1 Claim. (Cl. 20—67)



The combination with a frame forming a rectangular opening, and a similarly shaped closure member fitting in said opening of transversely square weather strips covered with resilient material and extending along the top, bottom and side edges of said closure within said frame in flat engagement with one face of said closure and the inner face of said frame, and means urging said strips into tight engagement with said faces and comprising hinges upon which said strips are swingable from engagement with said faces to obviate interference of the strips with said closure during opening of the same.

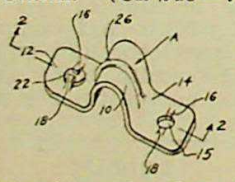
2,310,434

COMBINED STRAP AND FASTENER

Morris J. Hyman, Philadelphia, Pa.

Application January 9, 1941, Serial No. 373,826

1 Claim. (Cl. 248—71)



A BX cable or pipe retaining device comprising a substantially U-shaped strap having outwardly extending flanges, each of said flanges having an opening therein, each of said flanges having a pressed-out extension in said flange leading to said opening, a nail having a head and a shank, said nail shank interfitting with one of sid flange openings, and said pressed-out extension of the flange which terminates at said opening overlapping said nail head whereby said nail cannot slip from the flange opening.

2,310,435

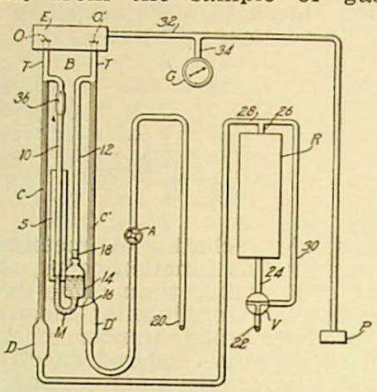
METHOD OF AND APPARATUS FOR GAS ANALYSIS

Arthur C. Jenkins, Kenmore, N. Y., assignor to The Linde Air Products Company, a corporation of Ohio

Application December 2, 1938, Serial No. 243,496

12 Claims. (Cl. 23—232)

11. A method of continuously indicating the percentage concentration of a given constituent of a gas under test which comprises passing samples of said gas through both sides of a viscosity effusion bridge; adjusting said bridge to indicate a zero percentage concentration of said given constituent; then chemically absorbing said given constituent from the sample of gas passing



through one side of said bridge without interrupting the continuous flow of gas through said bridge; and comparing the viscosity and density of one sample with the viscosity and density of the other sample to indicate the percentage concentration of said given constituent in said gas under test.

2,310,436

PRINTING UPON FABRICS

Melvin W. Johnson, Nutley, N. J., assignor to Pittsburgh Plate Glass Company, Allegheny County, Pa., a corporation of Pennsylvania

No Drawing. Application December 23, 1939, Serial No. 310,857

2 Claims. (Cl. 41—26)

1. A textile fabric embodying a dye imparting a desired ground color to the fabric, a design comprising a discontinuous film comprising 10 to 15 parts of urea-formaldehyde resin in final stage of hardening upon the fabric, the film containing 6 to 15 parts sebacic acid, modified alkyd resin as a plasticizer, and 30 to 65 parts of pigment, rendering the film opaque to the ground color and contrasting with said color.

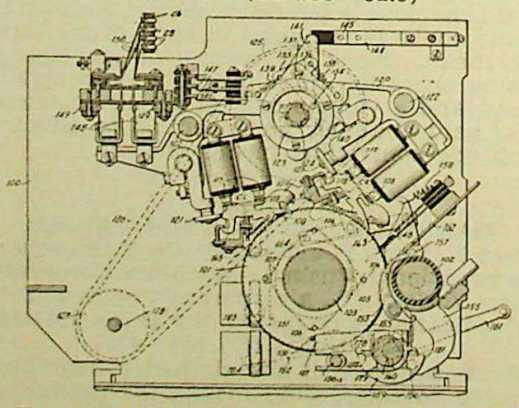
2,310,437

EDUCATIONAL DEVICE

Reynold B. Johnson, Binghamton, N. Y., assignor to International Business Machines Corporation, New York, N. Y., a corporation of New York

Application November 2, 1940, Serial No. 364,029

12 Claims. (Cl. 235—61.9)



1. In a machine of the class described, a plurality of ratchet wheels arranged in a row, a

plurality of pawls arranged in a row, one pawl for each wheel, each pawl normally engaging a wheel, a carriage, means for moving said carriage along said row of pawls, a magnet on said carriage, means for momentarily energizing said magnet during the movement of the carriage when the magnet is in line with any pawl to disengage the pawl from its wheel, means effective when the pawl is disengaged for advancing the pawl into engagement with a further tooth of the ratchet, and means on the carriage effective during the continued movement thereof for causing the pawl to advance its ratchet wheel.

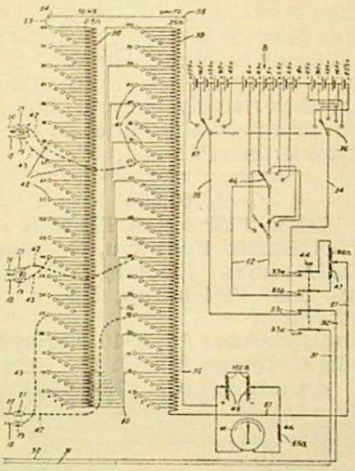
2,310,438

MULTIPLYING DEVICE

Reynold B. Johnson, Binghamton, N. Y., assignor to International Business Machines Corporation, New York, N. Y., a corporation of New York

Application February 1, 1941, Serial No. 377,029

5 Claims. (Cl. 235—61.8)



1. In a device controlled by a record upon which designations representing a multiplicand amount and its algebraic sign are made, the combination of means for sensing the amount designations, means for sensing the sign designations, a source of current, a device settable to represent the sign of a multiplier, means jointly controlled by said device and said sign sensing means for connecting the amount sensing means to either side of said source of current in accordance with the sign of the product, a plurality of resistors of equal ohmic value, connected in parallel by said amount sensing means to the selected side of said source, a multiplying potentiometer having points of connection thereto representing amounts, means for effecting connection between said selected parallel resistors and said points of connection in accordance with a multiplier amount, an indicating meter responsive to current values, controlled by said resistors and potentiometer to indicate the product of the multiplicand and multiplier amounts by the amount of deflection of its indicator and to indicate the sign of the product by the direction of such deflection.

2,310,439

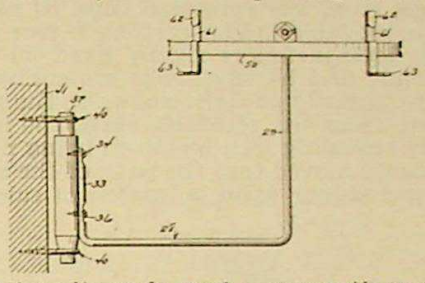
ADJUSTABLE DISPLAY STAND

Loren E. Johnson, Lander, Wyo.

Application December 2, 1941, Serial No. 421,375

10 Claims. (Cl. 211—32)

1. A hat display stand comprising a band, a brace located within the band and having its ends pivoted thereto, a bracket pivoted to the brace



intermediate its ends, and a supporting standard pivoted to the said bracket.

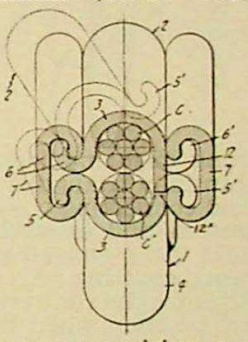
2,310,440

CABLE CLAMP

Victor E. Juslin and Joseph P. Carlevaro, Oakland, Calif., assignors, by mesne assignments, to John T. Kemper, Hayward, Calif.

Application January 30, 1942, Serial No. 428,838

5 Claims. (Cl. 24—126)



4. A cable clamp comprising a pair of elongated channeled members positioned together with their open sides in confronting relation providing a passageway between said members for a cable, parallel flanges respectively on the adjacent corresponding sides of said members extending longitudinally thereof and projecting outwardly of said members thereby providing a pair of said flanges at opposite sides of said pair of members; the flanges of each pair thereof being generally of uniform U-shape cross-section with their open sides facing oppositely outwardly and with their closed sides substantially together; a channel strip along each of said opposite sides of said members enclosing each pair of flanges between the opposite sides of each strip; the opposite sides of each strip along the free edges thereof extending inwardly toward each other and between the sides of said U-shaped flanges thereby securing said flanges together; means at one of the said opposite sides of said pair of members covered by one of said strips securing said pair of members together against longitudinal movement of said members relative to each other, and the strip at the other of said opposite sides of said members being slidable longitudinally of the flanges enclosed between the sides thereof to a position free from said flanges.

2,310,441

EXTENSIBLE LADDER RIG

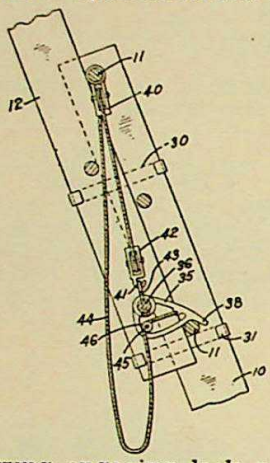
Blaine Klum, Oakland, Calif.

Application May 9, 1939, Serial No. 272,574

2 Claims. (Cl. 228—18)

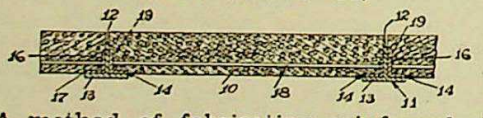
1. In an extensible ladder rig, a ground ladder, a movable ladder section slidably engaging the ground ladder, a rotatable rung in the movable ladder section, a member projecting from the rotatable rung and disposed intermediate its ends, pulley means anchored on the ground ladder and

having an operative connection with the member projecting from the rotatable rung to raise and lower the movable ladder section, a pair of rung engaging lock members rigidly fixed on the rotatable rung and having hooks projecting therefrom substantially at right angles to the member projecting from the rotatable rung, the hooks of said rung engaging lock members being normally but yieldably moved into the path of the rungs of the ground ladder upon actuation of said pulley



means, said rung engaging lock members each having a substantially triangular shaped opening therein, a tie rod connecting the legs of the movable ladder section and extending through the openings in said rung engaging lock members, and flexible means coacting with said tie rods operable at will to move the rung engaging members into inoperative position when the pulley means is being actuated to raise or lower the movable ladder section.

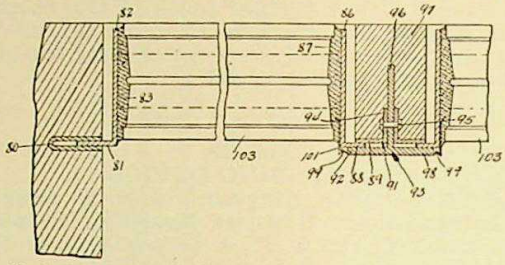
2,310,442
CELLULAR SLAB
Percy E. Knudsen, Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company, Allegheny County, Pa., a corporation of Pennsylvania
Application March 24, 1939, Serial No. 263,926
3 Claims. (Cl. 72—68)



1. A method of fabricating reinforced slabs of cellular glass which comprises disposing a frame of a contour corresponding to that of the desired cellular glass slab and having reinforcing rods interconnecting two opposed sides thereof, upon a slab providing a temporary mold bottom, partially filling the frame with a mixture of crushed glass and a gassing agent, heating the mixture to a temperature above that of sintering of the particles of glass and decomposition of the gassing agent, in order to form an expanded but coherent cellular body filling the frame and having the rods embedded therein, and further having a permanent frame disposed thereabout, then annealing the slab.

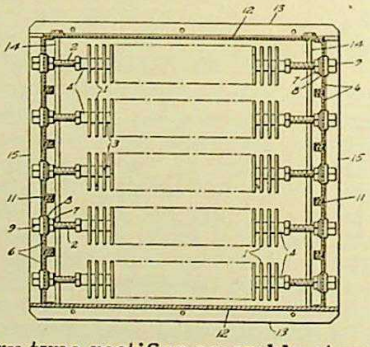
2,310,443
WALL CONSTRUCTION
Percy E. Knudsen, Pittsburgh, and John A. Desmone, Springdale, Pa., assignors to Pittsburgh Corning Corporation, a corporation of Pennsylvania
Application October 31, 1940, Serial No. 363,610
2 Claims. (Cl. 72—106)

1. A building construction comprising a wall having an opening formed therein, the portion of the wall above and contiguous to the opening constituting a lintel for the opening, a panel comprising glass blocks with peripheral grooves for receiving mortar laid in edge to edge relation with respect to each other in the opening, and the grooves in the upper course of blocks providing a channel along the upper edge of the panel, the upper edge of the panel being spaced from



the lintel, an angle bar cemented to the top edge of the panel by mortar embedded in said channel, said bar being provided with an upwardly turned flange contiguous to the plane of one face of the panel and guide means secured to said lintel and slidably engaging the face of the flange to maintain the panel from displacement by forces exerted vertically thereto, but permitting relative movement of the panel in its own plane without substantial strain.

2,310,444
DRY-TYPE RECTIFIER
Ernst Kriebel, Berlin-Spandau, Germany, assignor to Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa., a corporation of Pennsylvania
Application September 10, 1940, Serial No. 356,126
In Germany March 14, 1939
4 Claims. (Cl. 175—366)

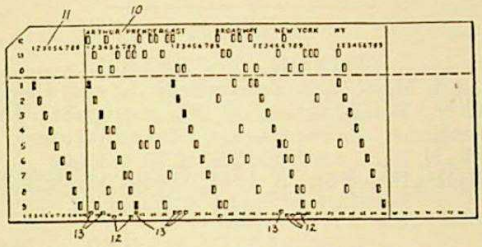


1. A dry type rectifier assembly structure comprising a plurality of individual rectifier units fastened on a through-bolt, a pair of end plates fastened respectively to the opposite ends of said through-bolt to constitute a unitary rectifier group, a plurality of said groups assembled so that their end plates are contiguous to each other and form two walls of a quadrilateral enclosure, and a pair of side walls supported in contiguity with the lateral edges of said end plates to form the other side walls of said enclosure.

2,310,445
PERFORATED RECORD CARD
William Lang, New York, N. Y., assignor to International Business Machines Corporation, New York, N. Y., a corporation of New York
Original application December 19, 1936, Serial No. 116,703, now Patent No. 2,195,865, dated April 2, 1940. Divided and this application December 16, 1938, Serial No. 246,043
7 Claims. (Cl. 235—61.12)

1. A record card for controlling the operation

of accounting machines, having a column of digit representing index point positions, one position for each of the digits, in which column there is also a classification identifying position, and perforations in any two of which index point positions represent two differently classed digits, the column being perforated in one of the index point positions to represent a digit of one class and perforated in another of the index point positions to represent a digit of another class and also perforated in the classification identifying position when the digit of the second class is greater in value than the digit of the first class, whereby



two different digits may be recorded in a single column and in a single set of digit representing index point positions and distinguishable in accordance with the presence or absence of a perforation in the classification identifying position.

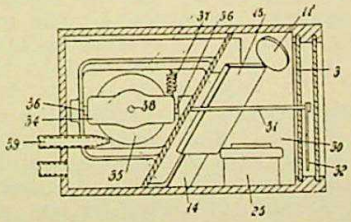
6. Means for controlling the operation of a machine comprising a sheet having a column of digit representing positions and a pair of class representing positions in which two digits of different classes may be represented by designations in positions corresponding to the values of the two digits and distinguished according to their class by a designation in a class representing position.

2,310,446

INSTRUMENT FOR INDICATING THE ATTITUDE AND BEHAVIOR OF AIRCRAFT IN FLIGHT

Thomas Winsmore Langley, Osterley, England, assignor to Tecalemit, Limited, Brentford, Middlesex, England

Application May 8, 1939, Serial No. 272,538
In Great Britain May 9, 1938
10 Claims. (Cl. 33—204)



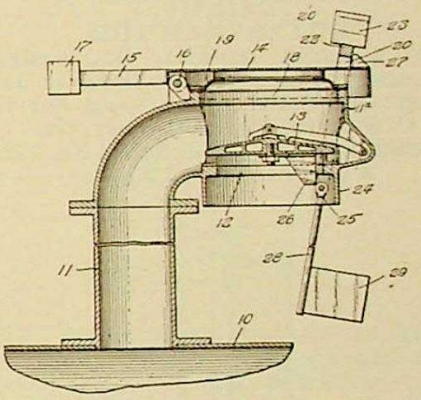
1. An instrument for indicating the attitude and behavior of aircraft in flight, comprising a casing, a lamp arranged at each side and at the front upper part of said casing, a fixed mirror aligned with each lamp, said mirror being disposed at the upper rear part of said casing with its reflecting surface directed and inclined downwardly and inwardly, a lens system for directing a beam of light from each lamp on to each of said mirrors, a mirror mounted for universal movement and disposed near the bottom of said casing and centrally between the said two lamps and mirrors, said universally-mounted mirror being adapted, except under abnormal circumstances, to remain perpendicular to gravitational force or to the resultant of gravitational and centrifugal forces acting on the aircraft and to receive beams of lights from said lamps directed on to it from said first mentioned mirrors, a screen disposed at the rear of said universally-mounted mirror, and inclined mirrors disposed in front of the latter in positions to reflect on to said screen, so as to form two spaced images thereon, the beams of light reflected to the universally-mounted mirror from said first mentioned mirrors.

2,310,447

VACUUM RELIEF VALVE

Donald E. Larson, Chicago, Ill., assignor to Chicago Bridge & Iron Company, a corporation of Illinois

Application February 20, 1942, Serial No. 431,629
2 Claims. (Cl. 137—53)



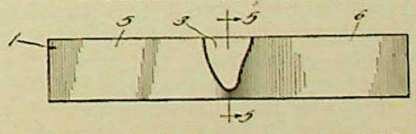
1. A vacuum relief valve, including: a casing with a vent opening to atmosphere; an inwardly opening disk for closing said vent adapted normally to be unseated when a predetermined sub-atmospheric pressure exists in said casing; a cam mounted on the casing adapted to be rotated to engage a part on the disk to unseat the same; means tending to rotate the cam; means normally holding the cam against rotation; and means operated by atmospheric pressure when the pressure in said casing reaches said predetermined sub-atmospheric pressure for releasing said holding means, whereby said cam will rotate and unseat the disk.

2,310,448

DENTAL APPARATUS

Henry H. Leib, Chicago, Ill.

Application March 11, 1940, Serial No. 323,467
5 Claims. (Cl. 32—63)



1. A comparatively long narrow ribbon having a portion thereof preformed to constitute a counterpart of a normal surface of a human tooth, said ribbon being sufficiently thin to enter the interproximal space in the mouth to permit the ribbon to be tensioned around a tooth, the preformed portion of the ribbon extending with its vertical axis across the ribbon so that upon insertion of that portion into the interproximal space the parts of the ribbon adjacent said portion extend across the adjacent teeth and constitute gripping parts for tensioning the ribbon, said ribbon being sufficiently flexible to permit deformation of the preformed part under tension to deform it to the actual shape of the adjacent part of the tooth.

2,310,449

AGE RESISTING RUBBERY MATERIAL AND METHOD OF MAKING

Irving E. Lightbown and John G. McNab, Roselle, N. J., assignors, by mesne assignments, to Jasco, Incorporated, a corporation of Louisiana

No Drawing. Application August 12, 1939, Serial No. 289,788

20 Claims. (Cl. 260—93)

19. An improved product comprising a rubbery organic material in admixture with a relatively small amount of a metallic salt of a member of the class consisting of alcohols, mercaptans, phenols and thiophenols, the metal of said salt being a member of groups II to VI of the periodic table.

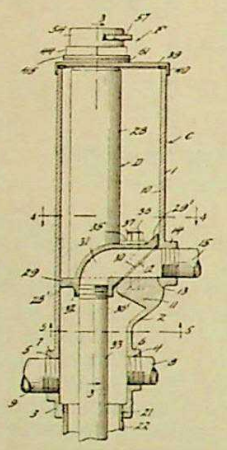
2,310,450

FILLERSTRACTOR

Harry W. Longdin, Atlanta, Ga., assignor, by mesne assignments, of one-third to James V. Malcolm, Jr., Decatur, Ga., and one-third to Julian C. Stanley, Fulton County, Ga.

Application May 5, 1939, Serial No. 272,016

3 Claims. (Cl. 220—86)



1. A suction line assembly for storage tanks including a casing open at its ends, one end adapted for connection with a storage tank, and provided intermediate its length with an outlet opening and a seat surrounding said opening, a filler and suction pipe combined in offset relation in a unitary structure removably seated within the casing, said unitary structure provided with means integral with said structure for establishing uninterrupted communication with said outlet opening and means on said first mentioned seat for centering and maintaining said unit in seating position.

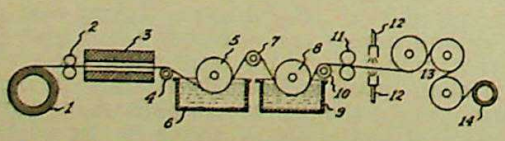
2,310,451

PROCESS OF COATING METAL ARTICLES WITH MOLTEN METAL AND OF PREPARING METAL ARTICLES FOR HOT COATING

William E. Marshall, Middletown, Ohio, assignor to The American Rolling Mill Company, Middletown, Ohio, a corporation of Ohio

Application June 17, 1940, Serial No. 340,912

3 Claims. (Cl. 148—7)



1. A process of preparing iron or steel for coating with molten metal, which comprises cleaning the iron or steel and coating it with a phosphorus bearing material chosen from a class consisting of a water solution of phosphoric acid, and a water solution, having an acid reaction, of a salt of phosphoric acid, drying the iron or steel so as to leave a coating of phosphorus bearing material on its surfaces, and thereafter heating it in the presence of a reducing atmosphere, at sufficient temperature and for a sufficient length of time to reduce the phosphorus bearing material and to cause phosphorus to be absorbed by the surfaces of the iron or steel.

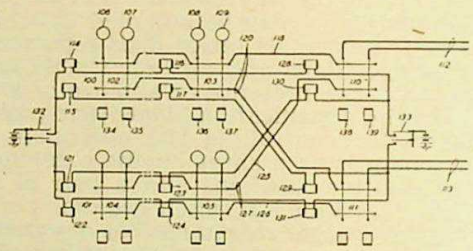
2,310,452

SWITCHING SYSTEM

Larned A. Meacham, Summit, N. J., and Carlyle V. Parker, Washington, D. C., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York

Application June 5, 1941, Serial No. 396,687

7 Claims. (Cl. 179—18)



1. In combination, primary switches, secondary switches, lines appearing in said primary switches, trunk groups appearing in said secondary switches, groups of links interconnecting the primary and secondary switches, operating magnets for said switches, a magnet operating circuit for each link including in series a primary switch magnet and a secondary switch magnet, electronic devices for said primary switches, means for operating one of said devices to select a group of links for serving one of said lines, electronic devices for said trunk groups, means for operating one of said trunk group devices to select a group of trunks to serve said line, means controlled by the operated electronic devices for applying potential to the magnet circuits of the links of the selected group outgoing from the primary switches and to the magnet circuits of the links incoming to the selected trunk group to effect the energization of the magnets of a single link interconnecting a primary switch in which said line appears and a secondary switch in which the selected trunk group appears, and means controlled by the energization of said magnets for establishing a connection from said line over the selected link to an idle trunk in said group.

2,310,453

AUTOMOBILE HEATER

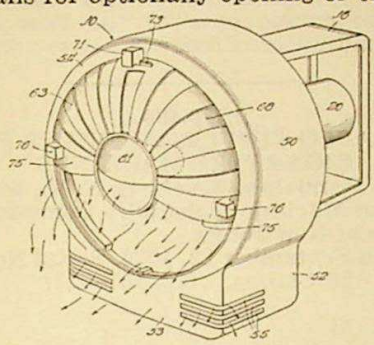
Walter G. Mitchell, Oak Park, and Arnold P. Hultgren, Chicago, Ill., assignors to Sears, Roebuck and Co., Chicago, Ill., a corporation of New York

Application March 10, 1939, Serial No. 260,900

13 Claims. (Cl. 98—2)

1. A heater of the class described, comprising a heat exchange unit, means for projecting a current of air therethrough, and a casing enclosing said unit, said casing comprising an outwardly curved member substantially closing the front

thereof, a portion of said member having vents with means for optionally opening or closing said



vents, and means for adjustably opening the remaining portion of the front closure member.

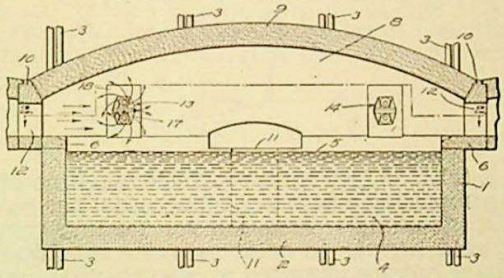
2,310,454

GLASS MAKING FURNACE OR TANK

Vergil Mulholland, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a corporation of Delaware

Application December 16, 1939, Serial No. 309,584

10 Claims. (Cl. 49—54)



1. A glass making furnace or tank, comprising a basin for containing a bath of molten glass having a substantially enclosed flame space thereabove, and a pair of fluid fuel burners associated with said flame space and both disposed in a single substantially vertical plane in such relation to one another that the flames therefrom will impinge together at a predetermined distance from said burners, said burners being constructed and arranged so that each imparts a swirling motion to the flame therefrom, and so that the direction of swirl of the flame from one of said burners is opposite to that of the other, whereby to provide a sheet of flame over the glass in said basin.

2,310,455

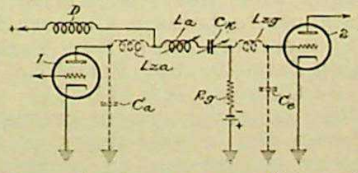
ULTRA SHORT WAVE AMPLIFIER CIRCUIT

Johannes Müller, Berlin, Germany; vested in the Alien Property Custodian

Application April 15, 1941, Serial No. 388,579

In Germany October 13, 1939

4 Claims. (Cl. 179—171)



1. An ultra short wave amplifier circuit comprising first and second electron discharge device stages, each stage having a cathode, an anode and a control electrode; a connection between said cathodes; and a tuned circuit having a single degree of freedom consisting solely of an inductive branch connected between the anode of said first stage and the control electrode of said second stage and a pair of series arranged capacities shunting said inductive branch, said capacities being solely the inherent capacities between the electrodes of said stages and the leads thereto; a connection from that terminal of the inductive branch which is adjacent the anode of the first stage to the positive terminal of a source of anode potential, said last connection having in series therewith a choke acting as an inductance at very high frequencies.

2,310,456

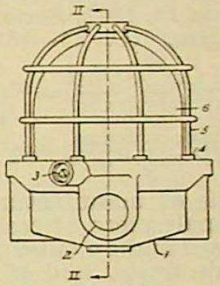
EXPLOSIONPROOF LAMP FITTING

Willi Nerlich, Berlin-Spandau, Germany, assignor to Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa., a corporation of Pennsylvania

Application September 10, 1940, Serial No. 356,121

In Germany August 30, 1939

3 Claims. (Cl. 240—11.2)



1. The combination in an explosion-proof lighting fixture having a casing member to which a globe is secured by a ring member attached to the casing by means of a bayonet locking arrangement, of a notched segment member attached to the ring member, a spring member attached to the casing adapted to releasably engage the notched segment member to lock the ring member to the casing, and cam means mounted on the casing in co-operative relation with the spring member and operable in one direction from without the casing for releasing the spring member from engagement with the notched segment member and holding it out of engagement therewith while the ring member is being detached from the casing, and means carried by the ring member for actuating the cam means in the opposite direction to permit the spring member to return to its normal locking position when the ring member reaches such position as it may be removed from the casing.

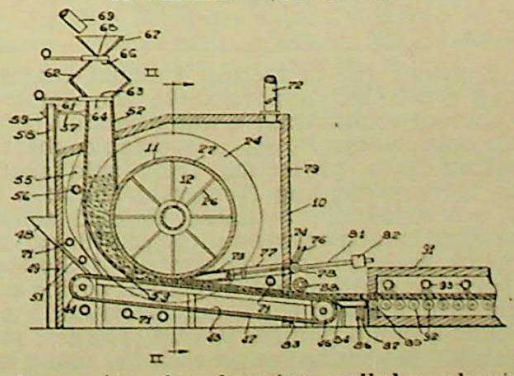
2,310,457

MANUFACTURE OF CELLULAR BODIES

William Owen, Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company, Allegheny County, Pa., a corporation of Pennsylvania

Application February 8, 1938, Serial No. 189,337

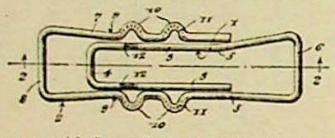
13 Claims. (Cl. 49—3)



1. Apparatus for forming cellular sheets by

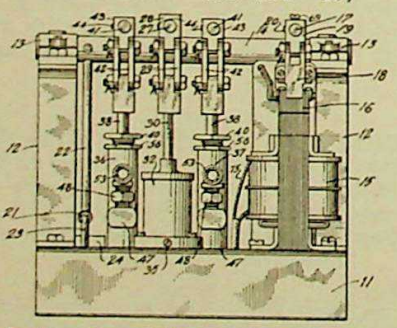
sintering a mixture of crushed vitreous material and a gassing agent decomposable by heat to liberate a gas whereby to form cells in the sintered mixture, comprising a heating chamber, a rotatable drum disposed in the chamber, means for depositing a relatively uniform layer of the mixture of crushed vitreous material and gassing agent upon the drum, and means for heating the interior of the drum to bring the mixture to the sintering point of the crushed vitreous material and to decompose the gassing agent while the mixture is upon the drum, and a wedge-like stripping member disposed to contact with the surface of the drum for removing the cellular sheet therefrom.

2,310,458
PAPER CLIP
William J. Peterson, Solana Beach, Calif.
Application June 15, 1942, Serial No. 447,122
1 Claim. (Cl. 24—261)



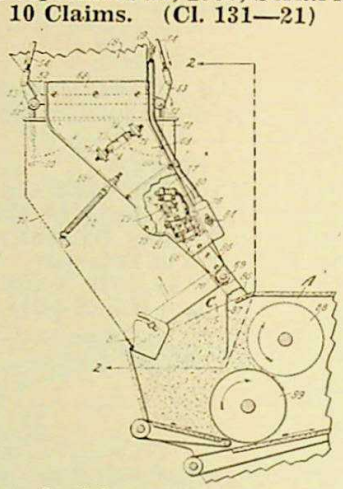
As a new article of manufacture a paper clip formed from a single piece of resilient material, comprising an inner and an outer jaw, said inner jaw including side units, said side units being bent outwardly near their inner ends, producing an outwardly-extending end on said clip, said outer jaw comprising side units, said last-mentioned side units each provided with a plurality of notched or roughened laterally-extending substantially U-shaped portions intermediate the ends of said side portions, and said jaws having their side portions bent outwardly near their outer ends, terminating in straight end portions, whereby a clip is produced with substantially square ends.

2,310,459
FLUID PROPORTIONING DEVICE
Raymond M. Potter, Denver, Colo., assignor to Western Filter Co., Denver, Colo.
Application October 12, 1940, Serial No. 360,894
9 Claims. (Cl. 210—40)



1. A device for delivering a liquid reagent to flowing water in proportion to the amount of flow thereof comprising: a water conduit through which said water flows; a rotatable shaft; an operating lever projecting from said shaft; a pump lever projecting from said shaft; a solenoid; an armature actuated by said solenoid; connecting means between said armature and said operating lever so that movement of the former will turn the shaft in one direction; spring means urging said shaft in the other direction; a pump cylinder; a pump plunger in said cylinder; means connecting the pump piston with the pump lever; means for supplying liquid reagent to said pump cylinder; a discharge conduit from said pump to said water conduit; and means for energizing said solenoid in consequence of the flow of water through said water conduit.

2,310,460
TOBACCO SUPPLYING MEANS FOR CIGARETTE MACHINES
Clifford F. Randolph, Brooklyn, N. Y., assignor to American Machine & Foundry Company, a corporation of New Jersey
Application September 22, 1938, Serial No. 231,149
10 Claims. (Cl. 131—21)

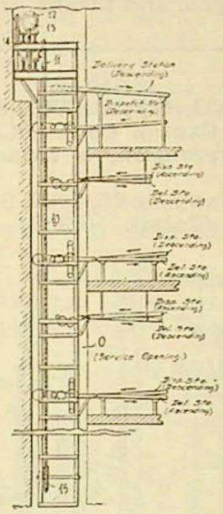


1. A tobacco feed for a cigarette machine of the type comprising a primary tobacco hopper having means including a feed roll for feeding tobacco from said hopper to said cigarette machine, an auxiliary hopper mounted above said first-named hopper and adapted to hold a supply of said tobacco and to direct said tobacco into said first-named hopper, the delivery portion of said auxiliary hopper providing a throat so disposed adjacent to the tobacco supply in said primary hopper that when the level of the tobacco in the primary hopper is at the desired working level, the tobacco at said level obstructs the passage of tobacco from said auxiliary hopper, while permitting an increased flow of tobacco through said throat when said level in the primary hopper goes below the said working level, said tobacco feed being characterized by the provision of a depending barrier mounted swingingly in the path feeding between said throat and said feed roll, and said swinging barrier being constructed and arranged to regulate automatically the rate of said feed according to the demand exerted by said feed roll.

2,310,461
VERTICAL CONVEYER SYSTEM
John E. Regan and Albert N. Klyver, Syracuse, N. Y., assignors to Lamson Corporation, Syracuse, N. Y., a corporation of New York
Application June 20, 1941, Serial No. 399,012
32 Claims. (Cl. 214—11)

3. A vertical conveyer system providing direct service between the several floors of a building served thereby comprising, in combination, an endless conveyer chain having ascending and descending runs extending between the several floors, driving means therefor, load conveying cars carried by said chain for travel therewith, a set of stations for each of the several floors including a delivery and a dispatch station adjacent the ascending run and a delivery and a dispatch station adjacent the descending run of the chain, said stations each including mecha-

nism movable into and out of a load transfer position with reference to a car passing the station, means for actuating said mechanisms, and means operatively related to each of the dispatch sta-



tions for controlling actuation of the station mechanism thereof and thereupon of the station mechanism of any selected one of said delivery stations.

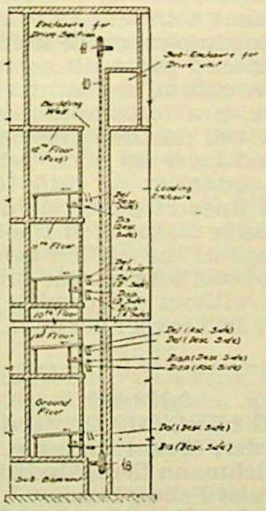
2,310,462

VERTICAL CONVEYER SYSTEM

Samuel Lippincott Griswold Knox, Englewood, N. J., assignor to Lamson Corporation, Syracuse, N. Y., a corporation of New York

Application September 20, 1941, Serial No. 411,734

24 Claims. (Cl. 214—11)



1. A vertical conveyer system providing direct service between the several floors of a building served thereby comprising, in combination, an endless conveyer chain having ascending and descending runs extending between the several floors, driving means therefor, load conveying cars carried by said chain for travel therewith, a set of floor stations for each of the several floors including a delivery and a dispatch station adjacent the ascending run and a delivery and a dispatch station adjacent the descending run of the conveyer, said stations each including mechanism movable into and out of a load transfer position with reference to passing cars, and a single drive unit for each floor set of stations operative to drive all station mechanisms of the station set thereof from the conveyor chain.

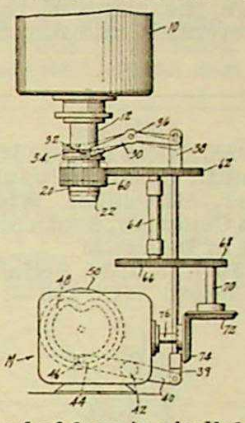
2,310,463

METHOD OF AND APPARATUS FOR MAKING BALL DOUGHNUTS

Lewis E. Russell, Catonsville, Md., assignor to Doughnut Corporation of America, New York, N. Y., a corporation of New York

Application October 4, 1941, Serial No. 413,575

5 Claims. (Cl. 107—54)



5. The method of forming ball doughnuts which comprises extruding a ring-like mass of dough, axially shearing annular ring formations from said mass, disrupting the surface of the ring formations during the shearing operation by a 360 degree rotation of the shearing means during the shearing operation, and thereafter heat treating the disrupted ring formations to form the ball doughnuts.

2,310,464

CARTON AND TRAY THEREFOR

Roy S. Sanford, Oakville, Conn., assignor to The Autoyre Company, Incorporated, Oakville, Conn., a corporation of Connecticut

Application July 22, 1938, Serial No. 220,627

14 Claims. (Cl. 206—42)

1. A carton comprising a tray formed of sheet metal having a plurality of spaced apertures, the material bounding said apertures forming seats for holding articles in spaced apart positions, a peripheral flange on opposed sides of said main body portion, and a casing embracing said tray and said flanges, each of said flanges having a portion deformed from the material thereof and out of its normal plane for engaging said casing to provide frictional resistance against relative movement therebetween.

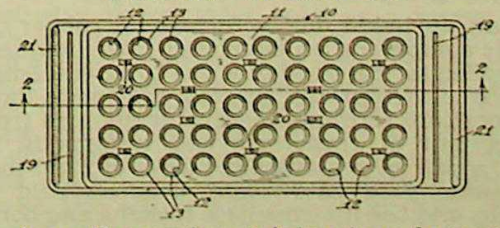
2,310,465

CARTON AND TRAY THEREFOR

Roy S. Sanford, Oakville, Conn., assignor to The Autoyre Company, Incorporated, Oakville, Conn., a corporation of Connecticut

Application August 18, 1939, Serial No. 290,720

2 Claims. (Cl. 206—42)



1. A small capsule retaining tray formed of a body portion of a substantially rigid material

having a plurality of spaced depressions therein for holding said capsules in spaced-apart positions, spaced flanges on opposed sides of said body portion extending above and below the tops and bottoms respectively of said capsules held in said tray, a flap resting on and between said flanges for preventing axial displacement of said capsules, and projections on said body portion extending above the plane of the tops of said capsules for preventing said flap from resting on said capsules.

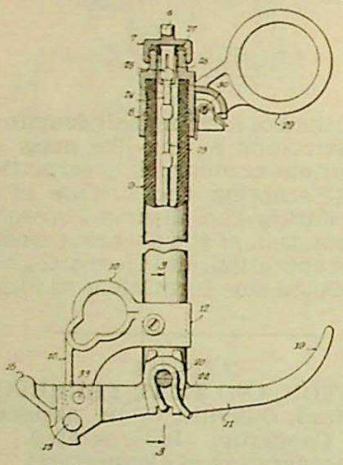
2,310,466

FUSE CONSTRUCTION

William O. Schultz, South Milwaukee, and Alwin G. Steinmayer, Milwaukee, Wis., assignors to Line Material Company, South Milwaukee, Wis., a corporation of Delaware

Application July 28, 1939, Serial No. 286,980

25 Claims. (Cl. 200—114)



1. A fuse device comprising a fuse tube having an open end, a fuse link within said fuse tube adapted to rupture upon overload, stationary contacts normally connected to form a circuit through said fuse link, and manually operable means located adjacent the open end of said fuse tube for breaking the fuse link thereby breaking the circuit within said fuse tube by the force manually imparted to said means.

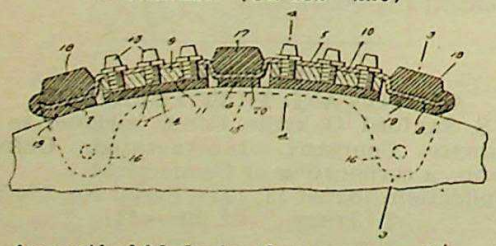
2,310,467

ANTISKID APPLIANCE

Emil P. Schwab, Pittsburgh, Pa.

Application June 28, 1941, Serial No. 400,305

2 Claims. (Cl. 152—229)



1. An anti-skid device for use on rubber tired wheels comprising an elongated plate adapted to be applied to the tread of a tire to extend lengthwise circumferentially thereof, said plate having bent portions forming a central transverse trough and a pair of transverse end troughs in said plate, a pair of rectangular blocks of rigid material underlying said plate between said end troughs and the intermediate troughs and bonded to said plate, said blocks having facings of resilient material for engaging said tire, an elongated member of resilient material fitted in said central trough, and a pair of elongated end members of resilient material fitted in said end troughs and extending around the ends of the plate under said end troughs, and means to attach the plate to a wheel.

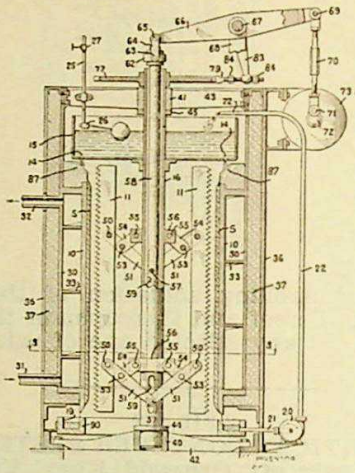
2,310,468

ICE MAKING APPARATUS AND METHOD

Frank Short, Canton Center, Conn., assignor to Flakice Corporation, a corporation of Delaware

Application January 29, 1938, Serial No. 187,761

17 Claims. (Cl. 62—106)



8. The method of commercially producing free bodies of a brittle congealed substance which comprises supplying the substance in a fluid state to a rigid congealing surface to form a brittle layer thereon and adhering thereto, so moving a cutting implement with respect to the layer as to cause the cutting implement to effect a succession of uniformly spaced penetrations into the layer, and causing the cutting implement at each penetration to develop a force acting along the line of penetration and on the border portion segregated from said layer by such penetration, the direction and intensity of said force and the spacing of the lines of penetration with respect to the compressive strength of the layer and the force of adhesion of the surface being so selected as to break the bond between the surface and said border portion without overcoming the compressive strength of said border portion.

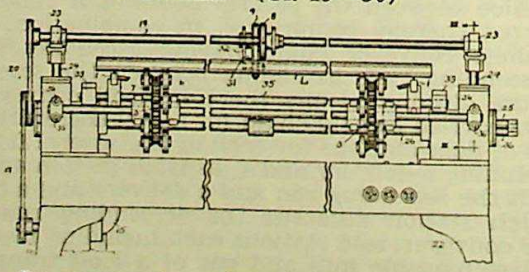
2,310,469

SEVERING LENGTHS OF GLASSWARE

Harold H. Snyder, Mount Lebanon, Pa., assignor to Forter-Teichmann Company, Pittsburgh, Pa., a corporation of Pennsylvania

Application June 9, 1942, Serial No. 446,333

9 Claims. (Cl. 49—50)



1. In apparatus for trimming cylindrical lengths of glass that includes a burner adapted to deliver a line of flames, means for rotating and for advancing as it rotates a length of glass

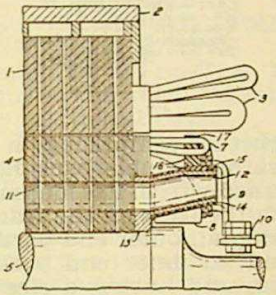
along and beyond the end of such line of flame, and means for severing the length of glass in its advance beyond the end of such line of flame, the invention herein described which consists in a traveling work support for advancing the length of glass and an overhanging work-rotating member adapted to be engaged from beneath by the advancing work and constituting the work-rotating means, the burner being arranged beneath the path of the advancing and rotating work.

2,310,470

VENTILATION OF DYNAMOELECTRIC MACHINES

Georg Soldner, Nuremberg, Germany, assignor to Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa., a corporation of Pennsylvania

Application October 30, 1940, Serial No. 363,446
In Germany July 5, 1939
4 Claims. (Cl. 171—252)



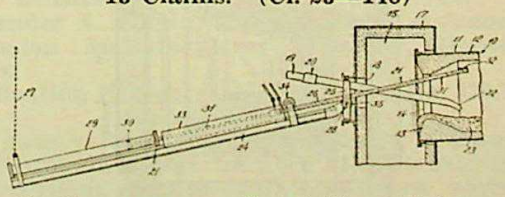
1. In a dynamo-electric machine, a rotor member having slots in its peripheral surface, windings in the slots having end portions which extend beyond the ends of the slots, said rotor member also having a plurality of axial passages therethrough for the passage of ventilating air, and a plurality of separate tubular members secured to an end surface of the rotor member at the ends of at least some of said axial passages, the tubular members being inclined outwardly from the axis of the rotor and extending past the end portions of the windings, and a sleeve member of insulating material fitting over each of said tubular members, said end portions of the windings being supported by the tubular members and insulated therefrom by said sleeve members.

2,310,471

RECOVERY OF VOLATILE METALS

Ernest W. Steckel, Slatington, and George T. Mahler, Palmerton, Pa., assignors to The New Jersey Zinc Company, New York, N. Y., a corporation of New Jersey

Application August 1, 1940, Serial No. 349,274
13 Claims. (Cl. 23—148)



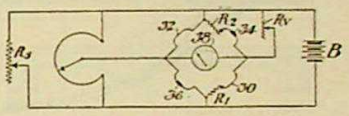
1. In the recovery of volatile metal as oxide from a solid charge containing a carbonaceous reducing agent involving passing the charge through an elongated rotating kiln countercurrent to a stream of oxidizing gas and heating the charge during its passage so that the volatile metal is evolved and burned in the kiln with resultant production of oxide fume that is withdrawn from the charging end of the kiln while a hot solid residue is discharged from the discharge end of the kiln, the improvement which comprises evolving and burning all but a small proportion of the volatile metal before the residue reaches the discharge end of the kiln, and before said residue reaches the blast, thereafter directing against this residue just prior to discharge from the kiln a blast of oxidizing gas to oxidize constituents in the residue and produce a zone of intense heat, and introducing further oxidizing gas into the kiln through said zone.

2,310,472

GAS ANALYZER

Alan P. Sullivan, Elizabeth, N. J., assignor to Cities Service Oil Company, New York, N. Y., a corporation of Pennsylvania

Application October 12, 1940, Serial No. 360,861
1 Claim. (Cl. 23—255)



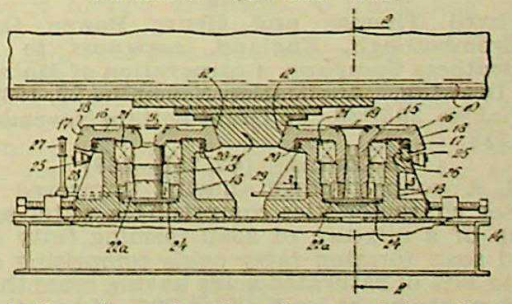
In a gas analyzer, a combustion cell and a comparison cell, a Wheatstone bridge electric circuit having two catalyst wire legs and two non-catalyst wire legs, a catalyst wire and a non catalyst wire being mounted in each cell, means for supplying heating current to the legs of the Wheatstone bridge, means for passing a stream of gas to be analyzed at a uniform rate through the combustion cell, a millivoltmeter shunted across the bridge for measuring bridge unbalance, and means for adjusting the balance of the bridge comprising a variable resistance shunted across the heating current supply, adjustable resistances connected in series respectively with the catalyst and non-catalyst legs in the combustion cell, and a variable resistance connected in shunt with the non-catalyst leg in the combustion cell.

2,310,473

THRUST MECHANISM

Ejnar Svendsen, Cranford, N. J., assignor to F. L. Smidth & Co., New York, N. Y., a corporation of New Jersey

Application April 24, 1942, Serial No. 440,387
4 Claims. (Cl. 308—203)



1. A thrust mechanism for receiving the end thrust of a rotary shell, such as a rotary kiln, which comprises a bearing box having an open top, a roller having a shank entering the top of the box and a head extending outwardly over the top of the box and provided with a thrust receiving surface adapted to roll on a similar surface on a tire on the shell and to take the thrust of the shell, a self-aligning bearing interposed between the shank and the inner wall of the box and lying in alignment with the line of thrust through the contacting surfaces on the head and tire, and means within the box en-

gaging the lower end of the shank and preventing movement thereof in a direction transverse to the longitudinal axis of the shell, the shank being permitted to move lengthwise of said axis by said means as the bearing aligns itself.

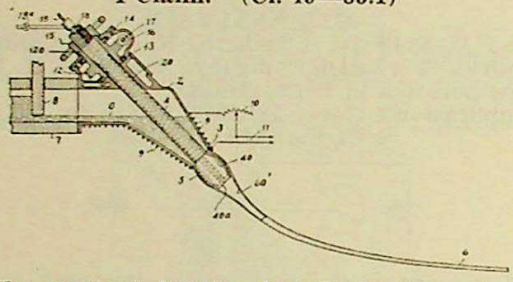
2,310,474

MANUFACTURE OF GLASS TUBING

Henry F. Teichmann, Washington, Pa., assignor to Forter-Teichmann Company, a corporation of Pennsylvania

Application August 10, 1940, Serial No. 352,093

1 Claim. (Cl. 49—83.1)



The method herein described of producing glass tubing that comprises delivering molten glass from the refining chamber of a glass furnace to the interior of a nozzle, drawing a tube of plastic glass from the nozzle and over a mandrel that extends through the orifice of the nozzle into a cooling atmosphere, the mandrel terminating adjacent said orifice and exterior thereof, the exterior end of the mandrel being enlarged relative to the remainder of the mandrel, whereby expansion and contraction of the tube as it is drawn over and from the end of the mandrel take place, circulating cooling liquid in regulated quantity within the mandrel to abstract heat from the internal surface of the tube, supplying heat to the molten glass within the nozzle and regulating the quantity of heat supplied relatively to the heat removed from the glass by the mandrel, whereby in the course of the operation skin is formed progressively on the inner and outer surfaces of the plastic tube, with subsequent solidification of the body of the tube between such surfaces.

2,310,475

SOAP

Richard Thomas and Henry Bowen Oakley, Bromborough, England, assignors to Lever Brothers Company, a corporation of Maine

No Drawing. Application November 22, 1939, Serial No. 305,728. In Great Britain November 22, 1938

5 Claims. (Cl. 252—109)

2. A soap product having improved hard water characteristics comprising a water soluble soap of a mixture of soap forming fatty acids, said soap forming fatty acids comprising about 10 to 30% of saturated acids having more than 18 carbon atoms, at least about 30% of unsaturated acids, not more than 30% of a mixture of palmitic and stearic acids whereof the stearic acid does not exceed 15% of the total fatty acids, and any other saturated acids present being of lower molecular weight than palmitic acid; and an alkali-metal phosphate selected from the group consisting of alkaline-reacting orthophosphates, pyrophosphates, polyphosphates and metaphosphates, the amount of said orthophosphates and pyrophosphates calculated as an anhydrous salt being 1 part to 4 to 10 parts by weight of the fatty acids in said soap, the amount of said polyphosphates and metaphosphates calculated as an anhydrous salt being 1 part by weight to 2 to 4 parts of the fatty acids in said soap, said soap product being in a solid finely divided form to insure rapid solution in water, whereby said soap product may be dissolved in hard water without substantial precipitation of insoluble soaps.

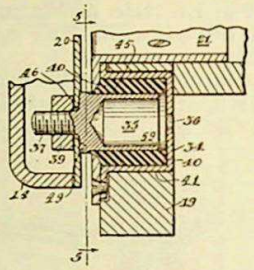
2,310,476

CHAIR

Edwin T. Todd, Grand Rapids, Mich., assignor to American Seating Company, Grand Rapids, Mich., a corporation of New Jersey

Application February 3, 1939, Serial No. 254,357

1 Claim. (Cl. 155—164)



A chair structure comprising: a frame; a forwardly-rearwardly tiltable back having a recess extending inwardly from its side; means for turnably mounting the back on the frame including a pivot pin having an outer end portion pivoted on the frame and an inner end portion extending into the recess and having a sleeve of resilient material secured thereon and within said recess for yieldingly resisting the tilting movement of the back, said outer end portion of the pivot pin having a threaded extension with a nut turnable into engagement with the frame for clamping the pivot pin non-turnably thereon.

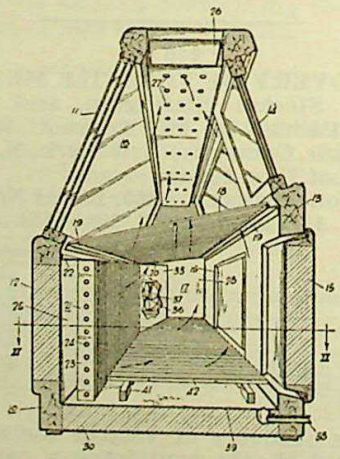
2,310,477

REFRIGERATION APPARATUS

Robert H. Tull, Springfield, Mass., assignor to Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa., a corporation of Pennsylvania

Application September 26, 1940, Serial No. 358,433

9 Claims. (Cl. 62—89.5)



1. In a refrigerator, the combination of an insulated cabinet, the length of which exceeds its breadth; a foraminated partition in said cabinet dividing the same into an upper and a lower food storage chamber; a flat cooling unit adjacent but spaced from one of the longitudinal walls of the lower food storage chamber, said cooling unit be-

ing substantially commensurate with said wall, said cooling unit having air passages therein substantially at right angles to the flat portion thereof; a substantially horizontal baffle at the upper edge of the cooling unit extending to the wall adjacent thereto to define an air duct together with said wall, said cooling unit, and a portion of the bottom of said cabinet; a second duct adjacent the upper interior wall of said cabinet and extending substantially the full length thereof, said duct having a plurality of openings distributed throughout its length and communicating with the upper food storage chamber; and means for forcibly conducting air from said second duct to said first-named duct, the air thereafter passing substantially horizontally through the air passages of the cooling unit and thereafter upwardly from the lower to the upper food storage compartment to cool said compartments substantially uniformly.

2,310,478

PROCESS FOR THE TREATMENT OF METHYLAMINES

William Tyerman, Norton-on-Tees, England, assignor to Imperial Chemical Industries Limited, a corporation of Great Britain

Application July 15, 1940, Serial No. 345,667
In Great Britain July 19, 1939
4 Claims. (Cl. 260—585)

1. A process for the separation of pure mono- and dimethylamines from mixtures containing them which comprises the steps of: (1) reacting a mixture of methylamines with a stoichiometrically inferior quantity of methyl formate; (2) separating the resulting formamides by distillation; and (3) thereafter reconverting the pure formamides into pure methylamines by hydrolysis.

2,310,479

VITAMIN PREPARATION FOR PARENTERAL ADMINISTRATION

Hermann Vollmer, New York, N. Y.

No Drawing. Application April 21, 1941, Serial No. 389,604
15 Claims. (Cl. 167—81)

1. A therapeutic agent for parenteral administration comprising, a composition of matter containing vitamin D, a vegetable oil, and ether in an amount less than 50% and suited to accelerate the spreading of the mixture after injection to form rapidly a large contact surface between the vitamin-containing oil and the tissues, thereby increasing the speed of absorption of the vitamin by said tissues.

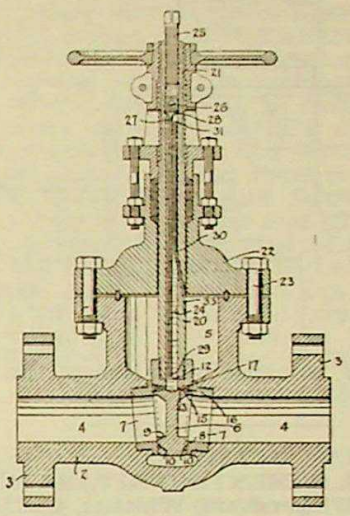
2,310,480

LUBRICATION FEED FOR VALVES

Alexander S. Volpin, Houston, Tex., assignor to Mission Manufacturing Company, Houston, Tex.

Application February 17, 1941, Serial No. 379,247
1 Claim. (Cl. 251—20)

A gate valve including a housing, a passage therethrough, a gate member to close said passage, a rising stem to operate said gate, seats in said housing about said passage to receive complementary faces on said gate member, a groove for sealing material in each of the faces, a reservoir for such material in said stem, means to introduce the material into said reservoir, an opening from said reservoir to each of said grooves, and means to utilize the line pressure leaking past one of said grooves to force material from said reservoir to said groove at the other seat including inverted piping in the reservoir to conduct introduced material to the base of the



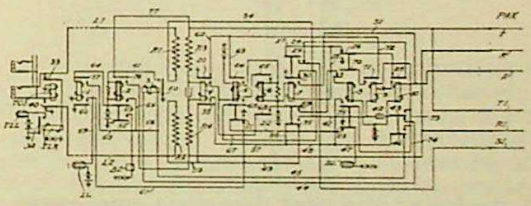
reservoir to flush out the pressure fluid, and to introduce the pressure fluid to the top of the reservoir to discharge the material from the bottom.

2,310,481

TWO-WAY TRUNK CIRCUIT

Bert A. Wallace, Chicago, Ill., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill., a corporation of Illinois

Application October 5, 1940, Serial No. 359,838
12 Claims. (Cl. 179—43)



1. A two-way trunk circuit for interconnecting a main exchange and an unattended private automatic branch exchange, a trunk line call lamp at the branch exchange to indicate an incoming call, relay means for operating said lamp, means arranged to permit any local subscriber to answer a call on said trunk in response to operation of said call lamp, and means operable by said answering private automatic exchange subscriber for effecting a holding circuit for said trunk call independent of all private automatic exchange apparatus.

2,310,482

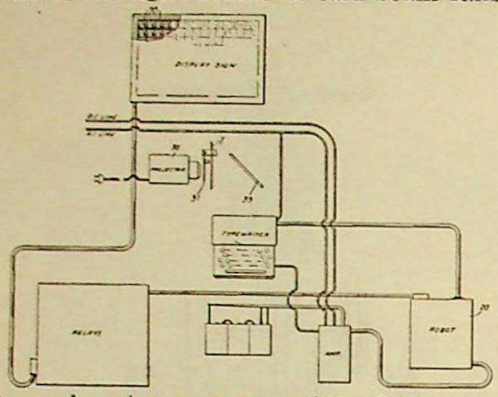
DISPLAY DEVICE FOR TYPEWRITERS

Thomas J. Watson, New York, N. Y., assignor to International Business Machines Corporation, New York, N. Y., a corporation of New York

Application September 27, 1940, Serial No. 358,572
17 Claims. (Cl. 197—20)

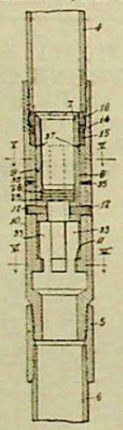
1. In a display device, a machine comprising a plurality of manipulative members, a light source, means for controlling the direction of light from said source to cause light beams to fall on the members in a predetermined sequence, individual means for operating said members, and means comprising a light responsive device mounted on

each manipulative member and rendered active by one of the light beams as said beam falls on



said member, to cause operation of the member by its individual operating means.

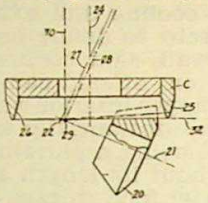
2,310,483
WELL CEMENTING APPARATUS
Newton W. Wickersham, Whittier, Calif., assignor, by mesne assignments, to Halliburton Oil Well Cementing Company, a corporation of Delaware
Application March 1, 1940, Serial No. 321,652
6 Claims. (Cl. 166—1)



1. A device of the type described comprising a tubular member adapted to be connected to a tubing string for selectively controlling transmission of fluid therethrough, said tubular member having slidably supported therewithin an open sleeve member for the passage of fluid therethrough, means releasably holding said sleeve member in an upper position in which the exterior surface of said sleeve member seals with said tubular member, said sleeve member being adapted to retain and seal with a packing plug forced down through said tubing, said holding means being releasable and said sleeve member being movable in response to predetermined pressure differential thereon into a lower position, and said tubular member having a fluid passage therein which is blocked by said sleeve member when the latter is in its upper position but is uncovered by movement of said sleeve member into said lower position.

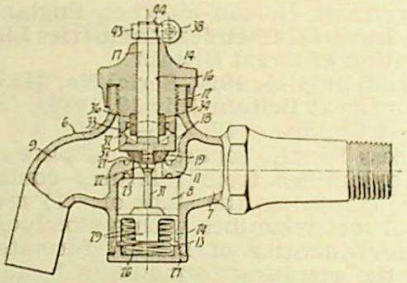
2,310,484
METHOD OF PRODUCING GEARS
Ernest Wildhaber, Brighton, N. Y., assignor to Gleason Works, Rochester, N. Y., a corporation of New York
Application November 21, 1939, Serial No. 305,531
27 Claims. (Cl. 90—5)

2. The method of generating tooth surfaces of a hypoid gear which comprises rotating a face-mill gear cutter in engagement with a tapered gear blank while rotating the blank on its axis and simultaneously producing a relative rotary



movement between the cutter and blank about an axis inclined to but offset from the blank axis, the ratio of the last two motions being varied during generation of a tooth surface.

2,310,485
FAUCET
Amos A. Wyckoff, Oakland, Calif., assignor to Bernice L. Yauney, Oakland, Calif.
Application September 3, 1940, Serial No. 355,153
1 Claim. (Cl. 251—132)

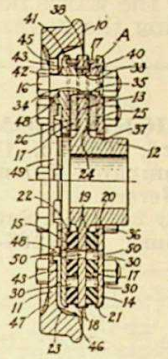


A faucet comprising, a body having a fluid passage therethrough and a valve seat in said passage and an opening in the side wall of said body substantially axially aligned with said seat, a closure threaded into said opening and having a central bore therethrough, a valve stem rotatably mounted in said bore and having an enlarged interior portion engaged with the inner end of said closure, said closure end and said enlarged stem portion being recessed centrally thereof to define a compartment therebetween and to further define annular contact faces, said contact faces being undulated to nest one within the other to effect longitudinal displacement of said stem upon rotation thereof, a valve carried by said stem at the inner side of said enlarged portion and movable with said stem into and out of engagement with said seat, spring means urging said valve from said seat and maintaining engagement between said contact faces, and a cylindrical gasket carried by said closure in said compartment and surrounding said stem and engageable with said enlarged stem portion in said recess thereof upon movement of said valve from said seat to seal said stem in said bore.

2,310,486
RESILIENT CAR WHEEL
Tim Zintsmaster, Cleveland Heights, Ohio, assignor to National Malleable and Steel Castings Company, Cleveland, Ohio, a corporation of Ohio
Application July 11, 1940, Serial No. 344,925
5 Claims. (Cl. 295—11)

1. A wheel comprising a rim portion having an inwardly extending annular flange, a hub member having an outwardly extending annular flange, a plate member adjacent said rim flange and having spaced areas of contact therewith, a second plate member on the same side of said rim

flange and spaced from said first plate, said plates being detachably secured to said rim flange, said hub flange extending between said plates, rubber means compressed between said hub flange and said plates acting in shear to oppose relative movement between said mem-



bers, and openings in said plates, said hub flange and said rubber means, positioned radially inwardly of said rim flange and adapted to receive retaining means for holding said rubber means compressed during removal of said rim portion from said plates.

2,310,487

COLORING PROTECTIVE COATING ON MAGNESIUM AND ITS ALLOYS

Herbert K. De Long, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a corporation of Michigan

No Drawing. Application January 17, 1941, Serial No. 374,893

18 Claims. (Cl. 148—6)

1. In a method of coloring hydrated oxide protective coatings upon surfaces of articles of magnesium and magnesium-base alloys, the step which comprises immersing the coated article in an aqueous solution of a water-soluble dye and a water-soluble salt of an unsubstituted organic carboxylic acid.

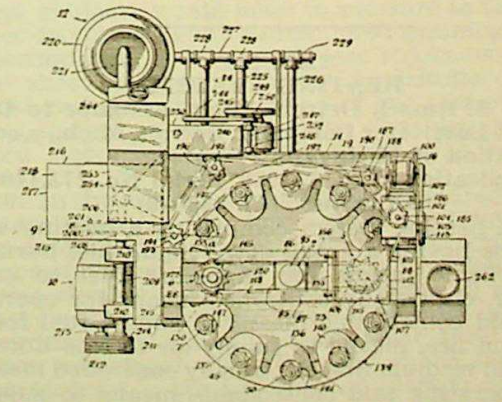
2,310,488

BLAST CLEANING APPARATUS

Roy W. Guite, Mishawaka, Ind., assignor to The American Foundry Equipment Company, Mishawaka, Ind., a corporation of Delaware

Application March 20, 1941, Serial No. 384,330

21 Claims. (Cl. 51—9)



1. Blast cleaning apparatus including in combination, means for projecting a stream of abrasive to define a blasting zone, a conveyor having a cam track associated therewith, means for supporting the workpiece on said conveyor, and automatic means for moving said conveyor to advance the workpiece into said blasting zone and out of said blasting zone, said advancing means being ineffective to rotate said frame for a predetermined time interval during residence of the workpiece in said blasting zone, said advancing means including a driving motor, a variable speed reducer having a driving connection to said motor, an endless flexible member having a driving connection with said variable speed reducer, a rotatably mounted shaft, a pawl fixed to said shaft, an element connected to said flexible member adapted to detachably engage said pawl to rotate said shaft during only a portion of the path of travel of said flexible member, and an arm fixed to said shaft movable into and out of engagement with the cam track associated with said conveyor to advance said conveyor a predetermined distance during rotation of said shaft.

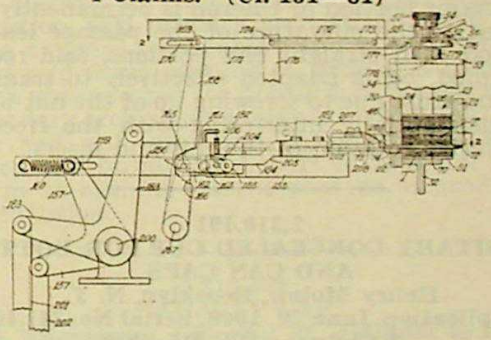
2,310,489

CIGAR BUNCH SEPARATING MECHANISM

John F. Halstead, Brooklyn, N. Y., assignor to International Cigar Machinery Company, a corporation of New Jersey

Application May 17, 1940, Serial No. 335,657

4 Claims. (Cl. 131—81)



1. In a cigar machine, the combination with means for compacting a column of tobacco, of a knife for severing a bunch charge from the compacted column, a device for determining the density of the column prior to severance of the bunch charge therefrom, mechanism controlled by said device for reducing the pressure with which said column is compacted by said means whenever said device detects an excessive density of the tobacco in said column, a member for ejecting the severed charge from the compacted column, and mechanism for relieving the pressure on the severed bunch charge during the removal thereof by said member.

2,310,490

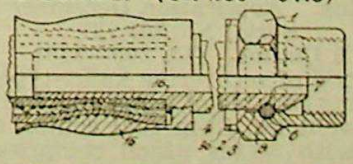
COUPLING

Walter Arthur Melsom, London, England, assignor to Bowden (Engineers) Limited, London, England, a British company

Application February 7, 1941, Serial No. 377,813

In Great Britain April 10, 1940

3 Claims. (Cl. 285—97.3)



2. A coupling component suited for medium or high pressure conduits, comprising a tubular insert member having an external annular groove therein and a co-acting screw nut member having an internal groove arranged to register with

and forming with the groove in said insert member a ring shaped passage generally circular in cross section, said nut and insert members being of an inner and outer diameter respectively as to render the said members relatively displaceable diametrically a distance slightly more than an amount normally necessary for a swivel fitting, said nut member being engageable with a screw element of the part to which the coupling component is to be joined, and said nut member also having a hole extending through the wall thereof in the plane of said annular passage and in a direction chordal to the bottom of the groove in the nut, the bottom of the groove in the insert when this is diametrically displaced and the junction of the wall of the hole with the bottom of the nut groove defining bearing points of a chordal path from said hole across said passage, a normally straight rod member of permanently deformable material and of circular cross section of a diameter not exceeding the width of said path introduced into said hole and along said path and deformed around the passage whereby the insert member acts as a fulcrum movable with respect to the nut member and coacting with the nut member to curve successive portions of the rod beginning inwardly from the leading end thereof so that the medial and major portion of the rod is permanently deformed to the curvature of the passage leaving the rod with straight end portions, said rod so deformed, being adapted effectively to transmit the end trust due to screwing up of the nut without substantially interfering with the freedom of relative rotation of the nut and insert.

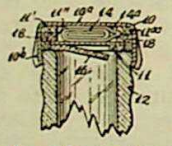
2,310,491

SANITARY CONCEALED CUP FOR BOTTLE AND CAN CAPS

Henry Molow, Brooklyn, N. Y.

Application June 20, 1940, Serial No. 341,408

3 Claims. (Cl. 215—38)



1. A device of the class described, comprising a cap shell having a top wall and a skirt wall and engageable with the neck opening of a bottle for closing the same, an annular cork seal mounted within said cap shell and having a central opening forming a storage compartment, a disc shaped seal extended across said cork seal and engaging the neck opening of said bottle for sealing the same, and a seal extended across the top face of said disc shaped seal for sealing said storage compartment to prevent liquid from said bottle from entering said compartment.

2,310,492

RECOVERING RESINS FROM COAL

Adriaan Nagelvoort, Salt Lake City, Utah

No Drawing. Application December 5, 1940, Serial No. 368,737

5 Claims. (Cl. 209—173)

1. A method of recovering kauri-type varnish-making resins capable of being run and dissolved in varnish vehicles, from coal containing resins associated with waxes which comprises granulating the coal to small particle size, introducing the granules into an aqueous solution of an inorganic compound of specific gravity between that of coal and resin containing therein a wetting agent in amount to wet the coal whereby the resins and waxes float and the coal sinks, recovering the floating resins and waxes and introducing them into an aqueous solution of an inorganic compound inert to resin having a specific gravity between the specific gravity of resin and wax, and a wetting agent in amount to wet the resin whereby the waxes float and the resins sink, and recovering the resins.

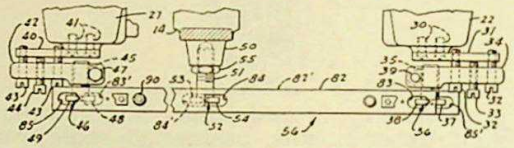
2,310,493

WEIGHING SCALE

Grant M. Richard, Toledo, Ohio, assignor to Toledo Scale Company, Toledo, Ohio, a corporation of New Jersey

Application July 24, 1940, Serial No. 347,177

5 Claims. (Cl. 265—54)



1. In a device of the class described, in combination, an even-arm lever, a frame, fulcrum pivots centrally located in said lever for rockingly mounting said lever on said frame, a pair of load receiver carrying members, a pivot in said lever adjacent each end thereof for supporting one of said load receiver carrying members, a plate having oppositely directed knife pivot edges secured to said frame, such pivot edges being in coincidence with a vertical plane passing through pivot edges of said fulcrum pivots in said lever, said plate secured to said frame being bisected by a plane passing vertically through the longitudinal axis of said lever, a plate having oppositely directed knife pivot edges adjustably secured to the bottom of each of said load receiver carrying members, the pivot edges on one of said plates being oppositely directed to the pivot edges on said plate secured to said frame and the pivot edges on the plate secured to the other of said load receiver carrying members being directed in the same direction as the pivot edges on said plate secured to said first mentioned load receiver carrying member, said plates secured to the bottoms of said load receiver carrying members being bisected by such plane passing vertically through the longitudinal axis of said lever and a check link comprising two identical plates having openings in the walls thereof which are adapted to engage such pivot edges for maintaining the condition of level of said load receiver carrying members.

2,310,494

HEATING SYSTEM

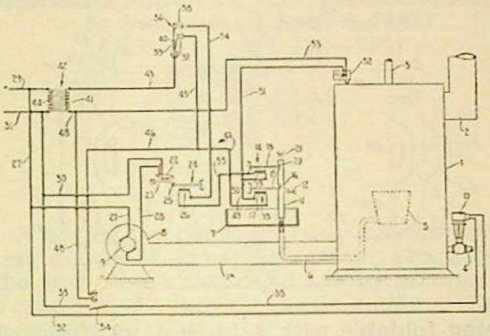
Philip S. Russel, Detroit, Mich., assignor to Detroit Lubricator Company, Detroit, Mich., a corporation of Michigan

Application May 11, 1939, Serial No. 273,140

5 Claims. (Cl. 236—9)

1. A heating system comprising a heating apparatus having a gravity type liquid fuel burner, controllable means for supplying fuel to said burner, electrically controlled means for operating said controllable means to supply fuel for a medium fire, means to supply air to said burner for said medium fire, electrically controlled means for operating said controllable means to supply fuel for a high fire, means responsive to temperature in a space to be heated by said apparatus and operable upon a predetermined low temperature to energize said first-named controlled means, and electrically operated means to increase the supply of combustion air through

said supply means to said burner for said high fire, said responsive means acting upon occurrence of a temperature below said low temperature to energize said second-named controlled means and said electrically operated air supply means, said last-named electrically operated air



supply means being so constructed and arranged relative to said second-named controlled means that said air supply means is energized and supplies said increased air prior to supply of fuel for the high fire by said second-named controlled means.

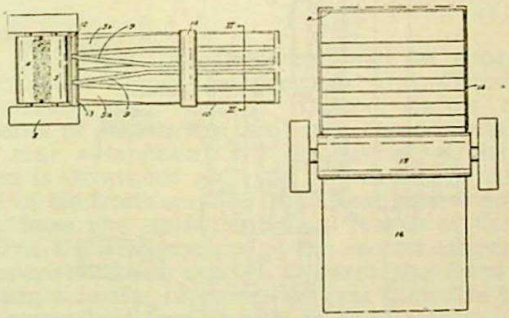
2,310,495

METHOD OF MAKING VARIEGATED HARD SURFACE COVERINGS

James F. Summersgill, Manheim Township, Lancaster County, Pa., assignor to Armstrong Cork Company, Lancaster, Pa., a corporation of Pennsylvania

Application December 18, 1940, Serial No. 370,627

15 Claims. (Cl. 18—56)



1. In the method of making a variegated hard surface covering, the steps comprising forming a vari-colored mass of differently colored compositions, subjecting said mass to pressure to form a sheet having a definite directional graining, and superimposing a ribbon of less thickness than said sheet and having a similar definite directional graining over a portion of one face of said sheet so that at least a portion of said superimposed ribbon extends beyond the edge of the sheet.

10. In the method of making a variegated hard surface covering, the steps comprising forming a vari-colored mass of differently colored granular compositions, subjecting said mass to pressure to form a sheet having a definite directional graining, removing a ribbon from said sheet of less thickness than the thickness of the sheet, disposing said ribbon along the edge of the sheet so that at least a portion thereof extends beyond the edge of the sheet, overlapping a plurality of similar sheets so that the ribbon on one sheet is disposed adjacent the face of a second sheet, and calendering the overlapped sheets at an angle to the direction of graining to form a continuous web.

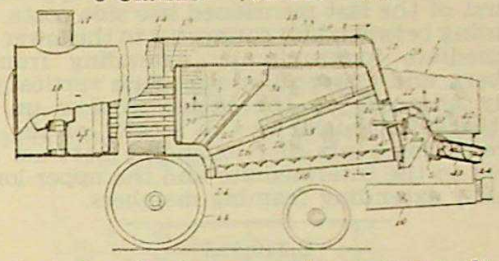
2,310,496

STOKER FIRED LOCOMOTIVE

Charles J. Surdy, Erie, Pa., assignor to The Standard Stoker Company, Incorporated, a corporation of Delaware

Application January 30, 1940, Serial No. 316,396

3 Claims. (Cl. 110—87)



1. A firebox having a grate, a top wall, upstanding side and end walls with a firing opening in one of said end walls intermediate said side walls, a transversely disposed primary arch in said firebox extending the width thereof, said primary arch sloping downwardly from that end wall provided with the firing opening and from a position above said firing opening toward the opposite end wall, said primary arch terminating short of said opposite end wall to provide a primary opening for the passage of products of combustion, said primary arch at its upper end having a corner recess above and at each lateral side of said firing opening to provide a passage at each upper corner for products of combustion, a secondary arch sloping upwardly from said opposite end wall over and above said primary opening and terminating short of said top wall to form an opening for the passage of products of combustion.

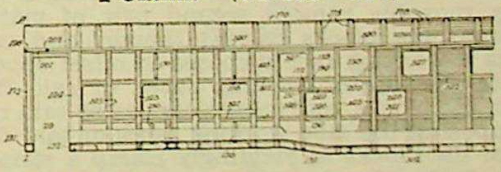
2,310,497

RAILWAY CAR

Nils A. Thunstrom, Chicago, Ill., assignor to Pullman-Standard Car Manufacturing Company, Chicago, Ill., a corporation of Delaware

Original application August 9, 1938, Serial No. 223,963. Divided and this application March 25, 1940, Serial No. 325,830

1 Claim. (Cl. 105—397)



A vehicle having a load carrying side wall, a lower longitudinally extending side wall member adjacent to the bottom of the wall, an upper longitudinally extending side wall member adjacent to the top of the wall, a plurality of vertical side posts extending between and secured to the lower and upper longitudinally extending side wall members, said lower and upper longitudinally extending members and said side posts constituting the main side wall load carrying framing members, a pair of windows disposed between two adjacent side posts and in vertical spaced relationship with respect to each other, the lower window lying closely adjacent to one of the last mentioned side posts and above the lower longitudinally extending member, and the upper window lying closely adjacent to the other of said last mentioned side posts and below the said upper longitudinally extending member, the two windows being staggered longitudinally of the car so as to provide insufficient room between the windows for the passage of a continuous, vertical

framing member from the lower to the upper longitudinally extending member, an intermediate longitudinally extending framing member between and secured to the said two side posts and disposed between the lower and upper windows, and intermediate vertical posts closely adjacent to the lower window on the side thereof opposite to the first of the last mentioned two side posts, and extending between and connected to the lower and intermediate longitudinally extending framing members, and a second intermediate vertical post closely adjacent to the upper window on the side thereof opposite to the second of the two adjacent side posts and extending between and secured to the intermediate and the upper longitudinally extending framing members.

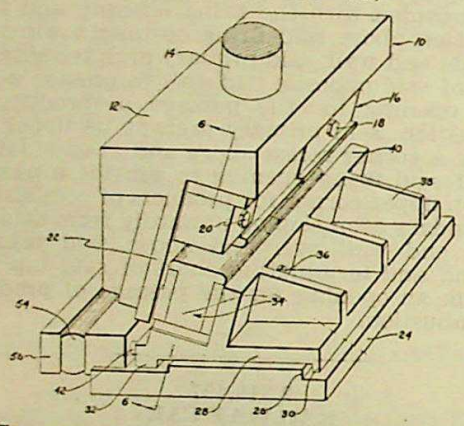
2,310,498

FORMING MACHINE

Robert S. Turton, Huntington Park, Calif., assignor to Douglas Aircraft Company, Inc., Santa Monica, Calif.

Application August 2, 1940, Serial No. 349,834

14 Claims. (Cl. 153—21)



1. In an apparatus for deforming angle shaped strips of metal, a horizontally movable base resiliently restrained against movement, a pair of co-planar die blocks mounted on said base and each having an upper working face at a slight angle to the horizontal and a side working face at a slight angle to the vertical, a vertically movable ram, a second pair of mating co-planar die blocks carried thereby and each having a working face disposed in offset opposition to the upper working faces of said first pair of die blocks, and means carried by said ram for opposing the side working faces of said first pair of die blocks to yieldingly clamp a strip of metal flatly therebetween upon movement of said ram toward said base.

2,310,499

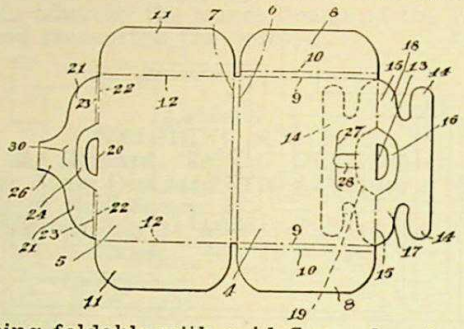
GARMENT CARRYING FOLDER

Joseph Hirsch Vineberg, Ottawa, Ontario, Canada

Application March 20, 1941, Serial No. 384,379

2 Claims. (Cl. 206—7)

1. A one piece garment carrying folder comprising a garment receiving section and a cover section connected along their bottom edges, the cover section being foldable on the garment receiving section to bring the top edges of the sections together, a flap in the form of a garment hanger extending from the top edge of the garment receiving section and foldable inwardly on said section along said edge to lie between the sections when the folder is in use, a cover flap extending from the top edge of the cover section and adapted to be folded along said edge over the free edge of the garment receiving section to lie in contact with the outer side of the latter section when the folder is closed, means for securing said flap in such position, and a handle projecting substantially centrally from the top edge of each section, each handle being formed in the body of and being straddled by the flap on the section from which it projects but



not being foldable with said flap, whereby when the flaps are folded openings of the shape of said handles are left in the flaps and the handles project clear of the top edges of the sections, the handle on the garment receiving section projecting through the opening in the cover flap.

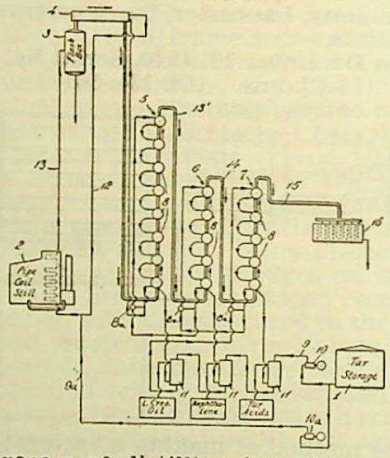
2,310,500

FRACTIONAL DISTILLATION OF TAR

Joseph Zavertnik, Englewood, N. J., assignor, by mesne assignments, to Allied Chemical & Dye Corporation, a corporation of New York

Application August 29, 1940, Serial No. 354,676

7 Claims. (Cl. 196—76)



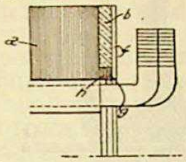
1. A process of distilling tar which comprises flowing tar in a restricted stream of narrow cross-section, heating the stream of tar without substantial vaporization of the tar to a temperature above 570° F., introducing heated tar from the stream into an expansion zone to volatilize a substantial portion of the normal oil content of the tar, rapidly cooling the vapors to a temperature of about 530° to 560° F. to condense heavy creosote oil so that the time during which each particle of the heavy creosote oil vapors is subjected to temperatures above about 570° F. does not exceed two minutes, continuously withdrawing heavy creosote oil condensate from contact with the residual vapors substantially immediately upon formation, flowing the residual vapors after separation of heavy creosote oil through a series of condensing zones, controlling the temperatures in each of said condensing zones so that the vapors leaving the first zone are cooled to a temperature of 390° to 430° F., the vapors leaving the second zone are cooled to a temperature of 330° to 350° F., and the vapors leaving the third zone to a temperature of 250° to 270° F., and removing the condensate from each of said zones.

2,310,501

DEVICE FOR REDUCING EDDY CURRENT LOSSES IN STATOR END PLATES

Paul Waldvogel, Baden, Switzerland, assignor to Aktiengesellschaft Brown, Boveri & Cie., Baden, Switzerland

Application March 10, 1941, Serial No. 382,640
In Switzerland April 6, 1940
6 Claims. (Cl. 171—252)



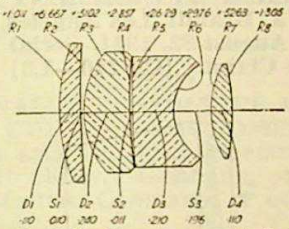
1. A device for reducing eddy current losses in the end plates of a machine stator, characterised by the end plates having an axially exterior layer of a material of high magnetic conductivity and high electrical resistance.

2,310,502

OPTICAL OBJECTIVE

Arthur Warmisham, Leicester, England, assignor to Taylor, Taylor & Hobson Limited, Leicester, England, a company of Great Britain

Application July 9, 1941, Serial No. 401,648
In Great Britain July 12, 1940
12 Claims. (Cl. 88—57)



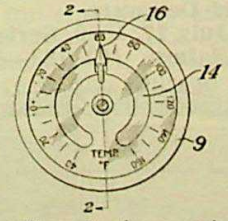
1. An optical objective corrected for spherical aberration, coma, astigmatism and distortion, comprising four axially aligned simple components of which the two front components and the rear component are convergent, whilst the third is divergent and has the radius of curvature of its front surface numerically greater than ten times the equivalent focal length of the objective, the rear surface of the second convergent component being convex towards the front and having a radius of curvature less than five times the equivalent focal length of the objective.

2,310,503

DAMPING AND CUSHIONING ARRANGEMENT FOR MEASURING INSTRUMENTS

Jules A. Widmer, Rochester, N. Y., assignor to Taylor Instrument Companies, Rochester, N. Y., a corporation of New York

Application July 17, 1941, Serial No. 402,782
3 Claims. (Cl. 73—367)



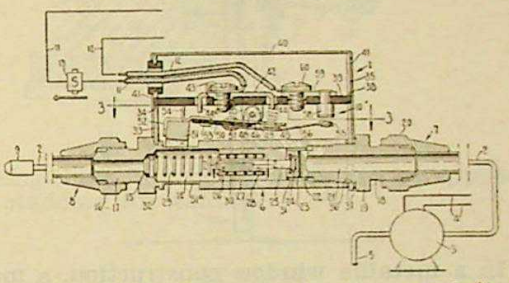
3. In an indicating instrument, a support, a pillar secured thereto, a condition sensing element having one end fastened to said pillar in a position wherein said element might strike said support when jolted, with resulting noise, an index connected to the other end of said element, and means made of sound cushioning material and rotatable on said pillar with predetermined friction therebetween, said means being interposed between said element and said support and engaging said index for movement therewith whereby said noise is obviated and flutter of said index due to shock is reduced.

2,310,504

CONTROL DEVICE

Fred B. Aubert, Grosse Pointe, Mich.

Application May 21, 1941, Serial No. 394,472
12 Claims. (Cl. 200—81)



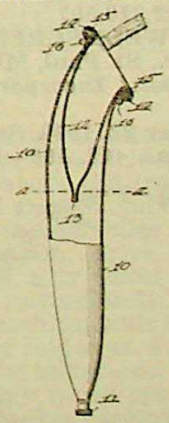
1. A control device comprising a conduit element, cooperable magnet and armature members, one of said members slidably fitting within and being longitudinally slidable upon change of fluid pressure in said conduit element, the other of said members being movably supported external of said conduit element and being movable by change in magnetic force between said members upon movement of said slidable member, and means operable upon movement of said external member.

2,310,505

URINAL BAG

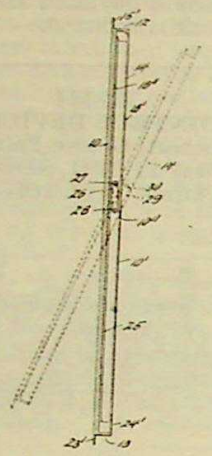
Lila I. Blackburn and Leander de Cordova, Los Angeles, Calif.

Application December 5, 1941, Serial No. 421,702
3 Claims. (Cl. 128—295)



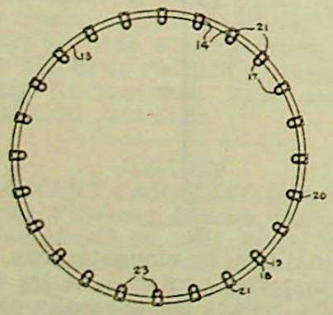
3. In a urinal bag, an elongated bag of flexible waterproof material provided at its lower end with an outlet, means for normally closing said outlet, a shorter bag of flexible waterproof material within the upper portion of said first mentioned bag and provided at its lower end with a restricted outlet, the upper portions of the two bags being permanently secured to each other, a flexible ring surrounding the connected portions of the bags, said connected being wrapped around said flexible ring, and means for securing the bag in position upon a wearer's body, which securing means includes a ring that surrounds the upper portions of the bags that are wrapped around said first mentioned ring.

2,310,506
WINDOW CONSTRUCTION
Robert H. Bliss, Syracuse, N. Y.
Application April 22, 1940, Serial No. 331,053
6 Claims. (Cl. 189—69)



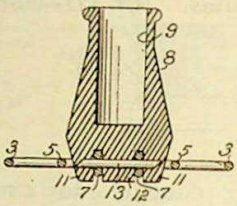
1. In a metallic window construction, a metal sash having spaced horizontal and vertical members defining a ventilator opening therein, inwardly extending flanges on the lower portions of the respective vertical members, a ventilator frame adapted to fit closely within said opening and arranged to swing about a horizontal axis intermediate the height of said frame through an angle of more than 90° from the plane of its closed position, flanges on said ventilator frame adapted to rest on and pivot about the upper edges of said flanges on said vertical members, and linkages connecting said ventilator frame to each of said vertical members, each said linkage comprising a link pivoted to said vertical member and a second link pivoted to said first link and having a pin and slot connection with said ventilator frame.

2,310,507
DEEP WELL SCREEN
Charles E. Bodey, Jr., St. Paul, Minn., assignor to Edward E. Johnson, Incorporated, St. Paul, Minn.
Application November 22, 1940, Serial No. 366,532
1 Claim. (Cl. 166—5)



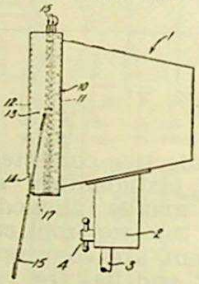
A well screen comprising a helix of wire forming a screening surface, spreader members on said helix formed with depending loops between each adacent pair of coils thereof, the loops serving to hold the helical coils equally spaced one from the other, a series of rods extending through said loops and engaging the helical coils on the inner circumference thereof for holding the spreader and binder members united to the helix, said rods extending outside of the end limits of the helix, and fittings secured to the extended portions of said rods.

2,310,508
MOP
Alvin A. Bohnenblust, Kansas City, Kans., assignor, by mesne assignments, to Harry E. Lindstrom, Sedalia, Mo., doing business under the name of Acme Broom Company
Application September 8, 1941, Serial No. 409,920
2 Claims. (Cl. 306—19)



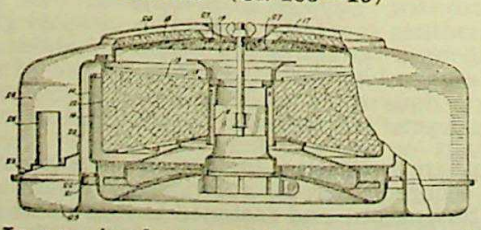
1. In a mop of the kind described, in combination, a wire foot member having its ends terminating respectively in two parallel spaced-apart eyes having the same transverse axis, a connecting member having handle attaching means and having portions at the distant sides of and between said eyes, and a separate pintle extending through said eyes and said portion between said eyes and having its ends respectively embedded in said distant portions.

2,310,509
LAMP ATTACHMENT
Robert J. Brandt, Los Angeles, Calif.
Application August 22, 1941, Serial No. 407,927
1 Claim. (Cl. 240—1.3)



A lamp attachment comprising a pair of U shaped side members of which one branch of the U is adapted to fit the sides of a lamp with the bottom of the U and the other branch thereof projecting in front of the lamp, a shelf on each of said side members for supporting the bottom of a filter frame, stop means for preventing the bottom of the filter frames from sliding off from said shelf, said side members being wide enough to accommodate a plurality of filter frames.

2,310,510
AIR CLEANER AND SILENCER ASSEMBLY
Benjamin Gratz Brown, Flint, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application July 17, 1940, Serial No. 346,046
3 Claims. (Cl. 183—15)



1. In an air cleaner and silencer assembly, a bowl-like member, a tubular member which opens through the bottom of the bowl-like member and

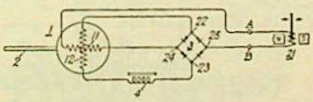
with it defines an annular liquid reservoir, an annular filter member with orifices in its lower and upper walls disposed within the bowl-like member with its outer side and lower walls spaced from the side wall and bottom of the bowl-like member to define a passage through which air may enter the orifice in the lower wall of the filter member, a member which is shaped like an inverted bowl with double end and side walls which define a sound wave attenuating compartment, the inner end wall of the member which is shaped like an inverted bowl being seated on the outer edge of the filter member and constituting a wall of a passage through which air may travel from the orifice in the upper wall of the filter member into the upper end of the tubular member, the side walls of the member which is shaped like an inverted bowl encircling the side wall of the bowl-like member with the inner side wall of the former spaced from the side wall of the latter to define with it a passage through which air may travel from the atmosphere into the upper end of the passage defined by the side wall of the bowl-like member and the outer side wall of the filter member, and an orifice above the tubular member in the inner end wall of the member which is shaped like an inverted bowl through which the sound wave attenuating compartment communicates with the passage through which air travels from the orifice in the upper wall of the filter member into the upper end of the tubular member.

2,310,511

DIRECTIONALLY RESPONSIVE ALTERNATING CURRENT TACHOMETER

Rudolf Buch and Friedrich Haemmerling, Berlin-Charlottenburg, Germany, assignors to General Electric Company, a corporation of New York

Application November 22, 1941, Serial No. 420,112
In Germany February 13, 1940
10 Claims. (Cl. 171—97)



10. In combination, alternating voltage generating means with relatively movable elements generating a voltage having a peak value at a predetermined relative position of the movable elements, means for inducing an alternating voltage with a peak value occurring at a different relative position of the movable elements, a normally blocked current passing device connected in series with the first-mentioned voltage generating means and a pair of output terminals and having a pair of control terminals for rendering the current passing device effectively conductive when energized with a given polarity, means for energizing said control terminals from the voltage inducing means, and means for introducing a displacement in the time phase between the voltage of said last-mentioned means and the energization of said control terminals.

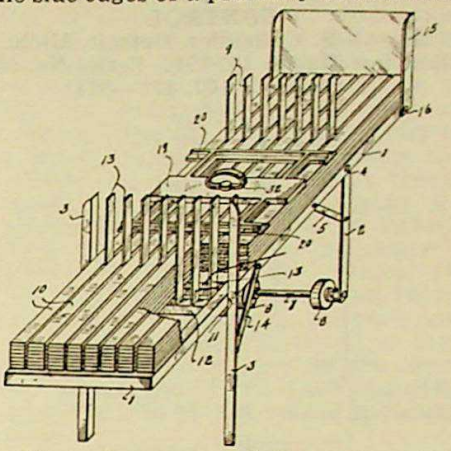
2,310,512

LATHING MACHINE

John F. Buller, Dallas, Oreg.

Application September 25, 1940, Serial No. 358,373
5 Claims. (Cl. 72—128)

1. A lathing machine including, means for supporting a plurality of laths in proper nailing spacing, and a clamp for directly interlocking with the side edges of a plurality of said laths and



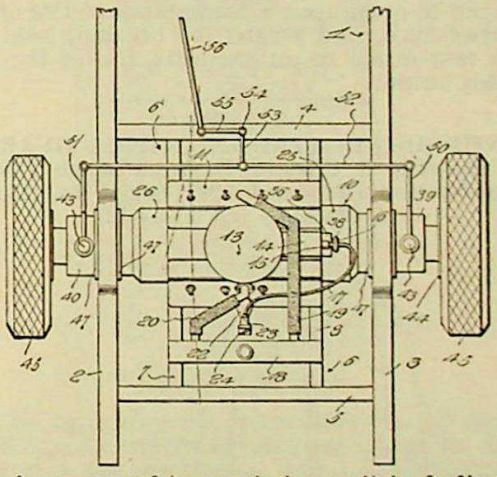
holding them in proper relation to be applied to the studding for nailing.

2,310,513

POWER AND TRANSMISSION UNIT

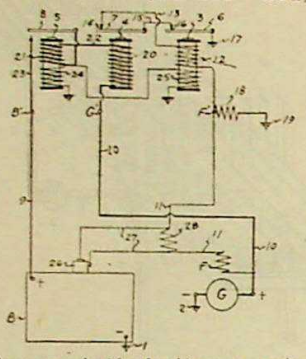
Henry N. Burns, Rossburg, Ohio

Application May 22, 1941, Serial No. 394,716
3 Claims. (Cl. 180—62)



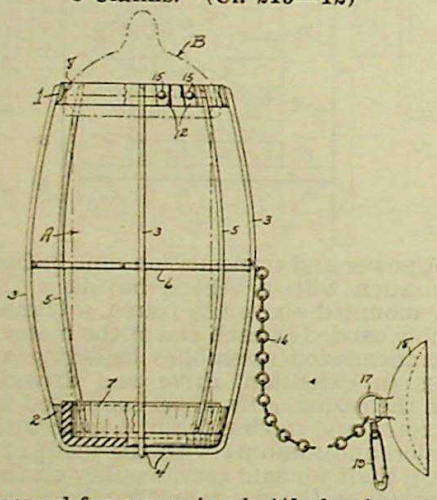
1. A power and transmission unit including, in combination with a vehicle having a frame, a motor mounted above the frame, a transmission assembly carried at each end of the motor, one of said transmission assemblies including a casing having an extension, drive and driven rotors within the casing, a fly wheel connected with the drive rotor and having teeth, a gear within the extension and meshing with the teeth of the fly wheel, a shaft for said gear, a pulley on the shaft, a generator on the motor and having a shaft provided with a pulley, a belt operatively connecting the pulleys, a bracket carried by the motor and having a bearing, a fan having a shaft rotatable in the bearing, a radiator mounted on the frame rearwardly of the fan and in close spaced relation thereto, a flexible shaft connecting the generator shaft with the fan shaft, a transmission assembly connected with each of the fluid drive assemblies, wheels connected with the transmission assemblies, means resiliently connecting the power and transmission unit with the frame, said fluid drive and transmission assemblies transmitting rotative movement from the motor to the wheels and said flexible shaft transmitting rotative movement from the generator shaft to the fan for cooling the liquid in the radiator, and means operatively connecting the radiator with the motor.

2,310,514
THERMOSTATIC STORAGE BATTERY CONTROL
Frank S. Callender, Detroit, Mich.
Application March 19, 1941, Serial No. 384,100
2 Claims. (Cl. 171—314)



1. In a thermostatic battery control, the combination with a storage battery, a generator for charging said battery including a shunt field, a resistance in series with said field for regulating the field strength, a circuit series-connected to the field for energizing the field independently of said resistance, a normally closed thermostatic switch controlling said circuit and subject to the internal temperature of the battery and adaped to open upon a predetermined rise of said temperature, and means for breaking said circuit responsive to an excessive rise of the generator output.

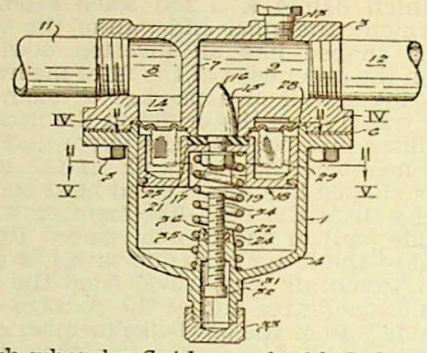
2,310,515
NURSING BOTTLE AND NIPPLE GUARD
Dorothy G. Chester, Daytona Beach, Fla.
Application October 4, 1941, Serial No. 413,677
3 Claims. (Cl. 215—12)



2. A guard for a nursing bottle having a nipple thereon, comprising an open frame container for receiving the bottle, a band at the upper end of the frame composed of separate sections resiliently connected together to cause a uniform pressure throughout the circumference on the nipple, and a latching means carried by the adjacent ends of two of said sections for holding the same together.

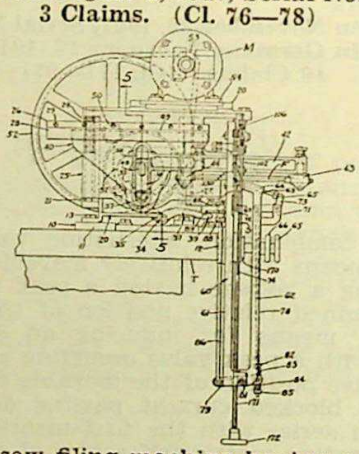
2,310,516
VALVE
George H. Clark, Washtenaw County, Mich., assignor to Square D Company, Detroit, Mich., a corporation of Michigan
Application February 10, 1940, Serial No. 318,258
4 Claims. (Cl. 137—139)

4. In combination, a valve structure comprising a casing having an inlet and an outlet in direct line, a valve for controlling communication therebetween, a piston actuable to move said valve, means carried by said casing and having an interfitting engagement with said piston for restraining the passage of foreign matter through the valve structure, spring means urging said valve into closed position, removable means carried by said piston and having an orifice there-



through whereby fluid may be bled through said piston to induce a pressure upon said piston to effect movement thereof in a direction opposite to the direction of said fluid movement to carry the valve into closed position, and an adjustable member supported by said casing and adapted to define the amount of opening movement of said valve to thereby determine the amount of fluid flow.

2,310,517
SAW FILING MACHINE
Freeman E. Collier, Minneapolis, Minn., assignor to Foley Manufacturing Company, Minneapolis, Minn., a corporation of Minnesota
Application August 3, 1940, Serial No. 350,577
3 Claims. (Cl. 76—78)



1. In a saw filing machine having a frame, a file mounted for reciprocating saw filing movement on said frame and means for progressively moving the saw undergoing filing, a variable pressure clamp for holding the saw lightly during progressive movement and tightly during filing comprising an anvil portion on the frame against which the saw undergoing filing is clamped and a clamping arm operable against a saw to force it against the anvil, said clamping arm having a pressure plate positioned to bear against the saw in line with the anvil, said pressure plate being slidably mounted on the arm, so as to be movable away from the arm and toward the anvil, a mechanical linkage positioned on the arm and connecting the pressure plate and a reciprocating part of the machine for forcing the pressure plate toward the anvil during saw filing movement and for releasing the pressure

plate during saw progressing movement, and means for adjusting the position of the clamp arm for adjusting the pressure of the pressure plate on the saw.

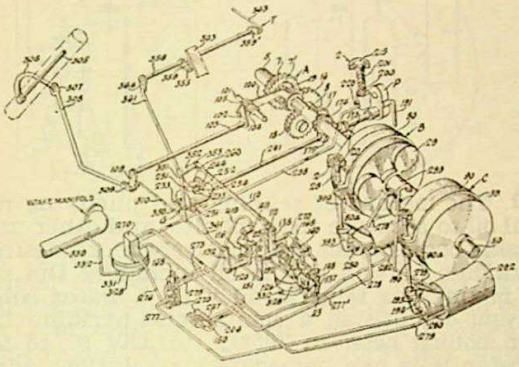
2,310,518

VACUUM CONTROL OF CLUTCH CAPACITY

John Dolza, Flint, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware

Original application October 18, 1937, Serial No. 169,535. Divided and this application May 3, 1940, Serial No. 333,230

10 Claims. (Cl. 192—.01)



1. In automatic controls for driving mechanisms, in combination, an engine, a variable speed control for said engine movable into various positions representing the torque demand of the operator, a clutch driven by said engine, auxiliary power means arranged to actuate said clutch, regulating means for said clutch connected to said power means effective to predetermine the torque capacity of said clutch, and a device responsive to changes in engine vacuum and subject to the variations of said speed control and acting on regulating means such that for increased operator torque demand the torque capacity of said clutch is increased.

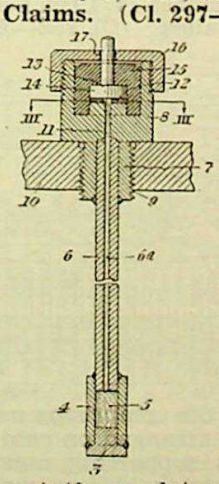
2,310,519

REGULATING DEVICE

Samuel G. Eskin, Mount Lebanon, Pa., assignor to Robertshaw Thermostat Company, Youngwood, Pa., a corporation of Pennsylvania

Application February 1, 1940, Serial No. 316,859

3 Claims. (Cl. 297—3)



1. In a thermostatic regulator of the type embodying a bulb, a small diameter capillary tube communicating therewith and a thermo-responsive fluid substantially completely filling the bulb and tube, the combination of a casing having a closed end with a passageway therethrough opening into the interior of the casing at one end thereof, the other end of said passageway communicating with said tube, a plunger positioned within the casing and having one end adjacent the end of said passageway, and a body of flexible material within said casing surrounding the passageway and the plunger and adhering tightly to the plunger and the side wall of the casing so that fluid entering the casing can escape therefrom only through said passageway, said body of flexible material being arranged to be flexed and the plunger moved relative to the casing upon the entrance of fluid into the interior of the casing through said passageway and being arranged so that as it moves to unflexed position due to the contraction of the liquid in the bulb the plunger is moved in the reverse direction and substantially all of the fluid entering the casing is forced out of the casing through said passageway.

2,310,520

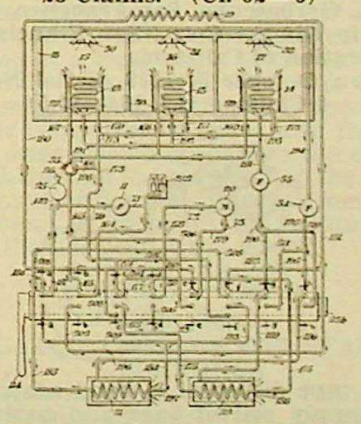
HEATING AND REFRIGERATING PROCESS AND APPARATUS

Robert Esnault-Pelterie, Boulogne-Billancourt, France; vested in the Alien Property Custodian

Application October 9, 1939, Serial No. 298,570

In Switzerland October 10, 1938

23 Claims. (Cl. 62—6)



18. In apparatus for controlling the temperature of the air within an enclosed space, in combination, a gas compressor and a gas-expansion motor both operating on a common crankshaft, conduits for conducting gas at an elevated pressure from the compressor to a first heat interchanger, then from said first heat interchanger to the motor, then at a less elevated pressure from the motor to a second heat interchanger, and then from said second heat interchanger to the compressor, at least one of said heat interchangers being arranged to exchange heat between the said gas and a current of the air whose temperature is to be controlled, valves for directing the flow of gas and of said current of air respectively to said heat interchangers, and common manually-operable means for simultaneously manipulating said valves to reverse the direction of flow of gas through the interchangers and to direct the flow of said current of air through one of said interchangers when it is desired to heat the enclosed space and through the other of said interchangers when it is desired to cool the same.

2,310,521

TABLE

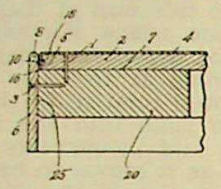
Reuben E. Goodman, Lowell, Mass.

Application September 9, 1940, Serial No. 355,913

6 Claims. (Cl. 311—106)

1. A table having, in combination, a frame

having a circular table-top-supporting surface and a circular edge surface meeting along a circular junction line, a circular band secured to the edge surface with a portion of the band contacting with the edge surface at the junction line and projecting beyond the supporting surface, a circular table-top portion supported on the supporting surface with the circular edge thereof



separated throughout the thickness of the table-top portion by a circular groove from the projecting portion of the band and from the junction line, means for securing the top portion to the frame, the frame comprising a plurality of separate cleats held together end-to-end in circular form by the securing means, and a circular covering stretched over the top portion and secured along the edge thereof in the groove.

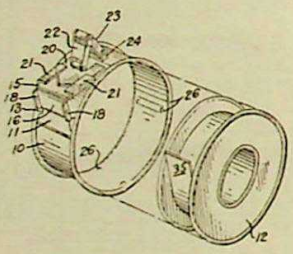
2,310,522

SINGLE ROLL TAPE DISPENSER

Dimitri L. Gorbatenko, San Francisco, Calif., assignor to Dimgor Corp., San Francisco, Calif., a corporation of California

Application October 5, 1939, Serial No. 298,020

4 Claims. (Cl. 164—84.5)



1. In a tape dispenser, a band adapted to receive a supply roll of tape and having a slot therein through which the free end of the tape may be fed from the supply roll, a triangular shaped projection on the band, said projection having one leg thereof secured to the band in juxtaposition to said slot and over which the tape is adapted to be pulled as fed from the supply roll, and tape severing means on the other leg of the projection movable from inoperative to operative positions to sever the tape at the apex of the triangular projection.

2,310,523

PROCESS FOR THE PRODUCTION OF DIOLEFINS

Herbert P. A. Groll, Hamburg-Wellingsbuttel, Germany, and George W. Hearne and George E. G. von Stietz, Berkeley, Calif., assignors to Shell Development Company, San Francisco, Calif., a corporation of Delaware

No Drawing. Application December 19, 1938, Serial No. 246,666

19 Claims. (Cl. 260—680)

17. The process of subjecting substantially anhydrous vapors of a dihaloparaffin containing two halogen atoms substituted into a nuclear hydrocarbon chain consisting of four non-quaternary carbon atoms to thermal dehydrohalogenation at a temperature in the range of from 525° C. to 800° C.

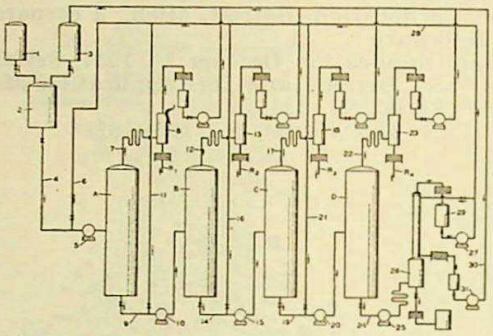
2,310,524

SOLVENT EXTRACTION OF HYROCARBON MATERIALS

Robert W. Henry, Bartlesville, and James V. Montgomery, Okmulgee, Okla., assignors to Phillips Petroleum Company, a corporation of Delaware

Application March 25, 1940, Serial No. 325,843

4 Claims. (Cl. 196—13)



1. The method of refining and purifying mineral oil to separate the asphaltic and other undesirable bodies from the relatively more desirable paraffinic portion of the oil including the steps of mixing the mineral oil with a water soluble solvent comprising a commercial pyridine fraction boiling between 260° F. to 320° F., to form substantially one homogeneous solution, adding to the solution a constant boiling point mixture of water in a fraction of commercial pyridine boiling between 260° F. to 320° F. as a precipitant to separate the solution into a desirable raffinate phase and a less desirable extract phase, separating the two phases, adding to the extract phase additional constant boiling point mixture of water in a fraction of commercial pyridine boiling between 260° F. to 320° F. as a precipitant to separate the extract into a second raffinate phase and a second extract phase, again separating the two phases and then separating from the second extract phase previously added solvent and previously added constant boiling point precipitant in one operation.

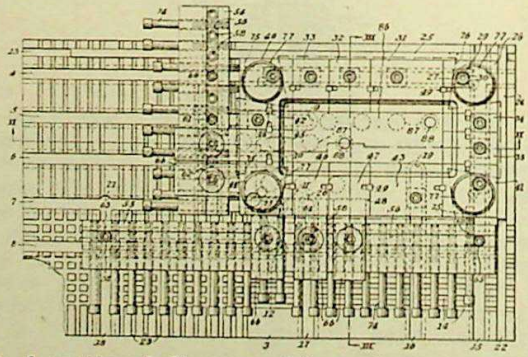
2,310,525

SECTIONAL DIE

William F. Heller, Norwood, Ohio, assignor to Ashley F. Ward, Cincinnati, Ohio

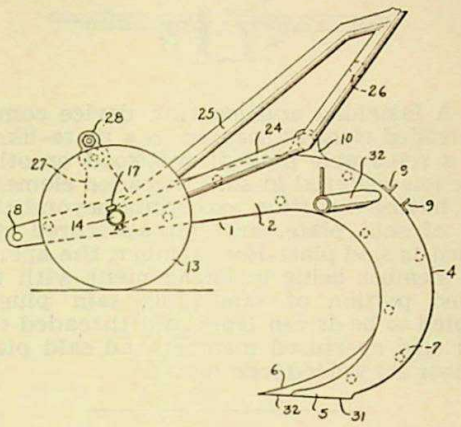
Application November 14, 1939, Serial No. 304,318

2 Claims. (Cl. 153—22)



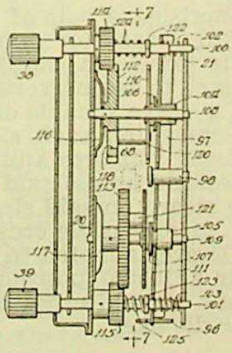
1. A sectional die comprising a base, cooperating die sections arranged on said base, an elongated holddown supporting member connected with the base and holddown means carried by said supporting member and adjustable longitudinally thereof and having projecting portions engaging the die sections to maintain the same in place relatively to the base.

2,310,526
ROCK ROOTER PLOW
Joseph R. Horrigan, Houston, Tex.
Application July 19, 1941, Serial No. 403,086
4 Claims. (Cl. 262—8)



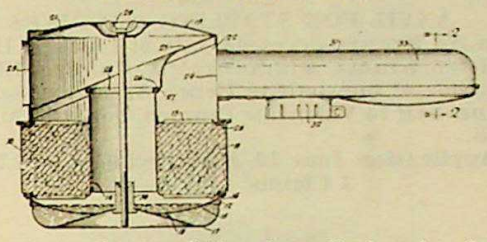
1. A rock rooter plow comprising a plow beam formed of spaced vertical plates, means for anchoring the plates in fixed relation to each other, the rear ends of the plates being downwardly turned and terminating in forwardly directed breaker points integral therewith and of approximately the same thickness of the plates whose lower margins are formed into plane running surfaces, ground runners, means under the control of an operator connecting the runners to the beam and effective, upon rotation thereof, to vary the elevation of the breaker points relative to the ground runners.

2,310,527
TIMING MECHANISM
Arthur R. Hutt, Thomaston, Conn., assignor to General Time Instruments Corporation, New York, N. Y., a corporation of Delaware
Application September 16, 1940, Serial No. 356,891
15 Claims. (Cl. 200—39)



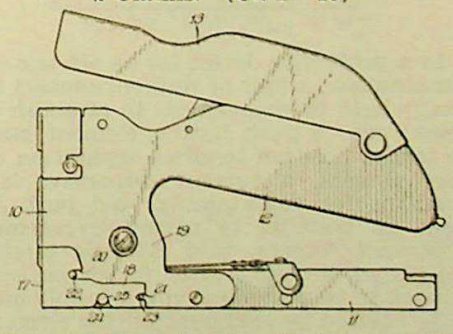
2. Timing mechanism comprising contact actuating means biased to open circuit position, two time actuated releasing means disposed in side by side relationship, and a floating bar associated with said releasing means and having a portion engaging said contact actuating means in such a manner that operation of one of said releasing means will cause said contact actuating means to be displaced to closed circuit position, and operation of said second releasing means will cause said contact actuating means to be restored to its normal position.

2,310,528
AIR CLEANER
Herbert G. Kamrath, Flint, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application July 13, 1940, Serial No. 345,314
1 Claim. (Cl. 183—15)



In an appliance of the class disclosed, a bowl-like member which constitutes a liquid reservoir, an annular filter member with a center tube which extends upwardly beyond the level of the portion of the filter member which encircles it disposed above the bowl-like member with the center tube and the portion of the filter member which encircles it opening at their lower ends into the bowl-like member, a cover shaped like an inverted bowl disposed above the filter member, an inclined partition which divides the interior of the cover into a lower compartment into which the portion of the filter member which encircles the center tube opens at its upper end and an upper compartment and has in it a depression whose bottom is disposed at a right angle to the axis of and is seated on the upper end of the center tube of the filter member with an orifice in it through which the upper compartment opens into the tube, an air inlet orifice which opens into the upper compartment through the side wall of the cover, and an air outlet orifice which opens from the lower compartment at its point of maximum height through the side wall of the cover.

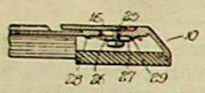
2,310,529
MAGAZINE CLOSURE FOR STAPLING MACHINES
Edward Krantz, deceased, late of Chicago, Ill., by Helen Krantz, administratrix, Chicago, Ill., assignor of one-half to Henry A. Torstenson, and one-half to Valentine Pearson, both of Chicago, Ill.
Application June 12, 1941, Serial No. 397,789
2 Claims. (Cl. 1—49)



1. In a fastener driving device comprising a head with a vertical fastener driveway and a staple driving blade in the guideway; a removable front wall section for said guideway provided with flanges which extend rearwardly in engagement with the side walls of the head, indexing studs which project laterally from the side walls of the head into rearwardly opening notches in the flanges for positioning the flanges accurately when the same are moved into their rearmost positions, means for positively locking the flanges

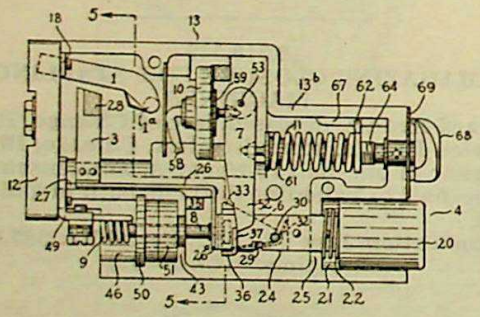
in their rearmost positions, and spring means for maintaining the locking means in operative position, said spring means being resiliently yieldable to permit the locking means to release the front wall section.

2,310,530
ANVIL FOR STAPLING MACHINES
Edward Krantz, deceased, late of Chicago, Ill., by Helen Krantz, administratrix, Chicago, Ill., assignor of one-half to Henry A. Torstenson and one-half to Valentine Pearson, both of Chicago, Ill.
Application June 12, 1941, Serial No. 397,790
3 Claims. (Cl. 1—3)



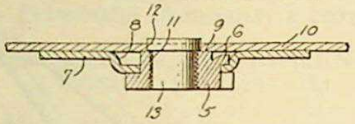
1. In a stapling machine, an anvil structure comprising a fixed section and a shiftable section, the fixed section being provided with an inwardly directed bending groove for the reception of one leg of a staple and the shiftable section being provided with both an inwardly directed groove and an outwardly directed groove, said shiftable section being movable from a position in which one of its grooves is in alignment with the groove in the fixed section to a position in which the other of its grooves is in alignment with the groove in the fixed section.

2,310,531
PROTECTIVE DEVICE
Clarence W. Kuhn and Edwin W. Seeger, Wauwatosa, Wis., assignors to Cutler-Hammer, Inc., Milwaukee, Wis., a corporation of Delaware
Application June 7, 1941, Serial No. 396,999
13 Claims. (Cl. 200—124)



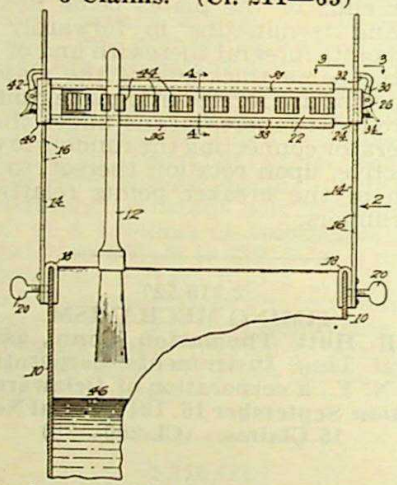
6. In a protective device for an electric circuit, in combination, a pair of resilient contact fingers normally held in engagement to establish circuit therebetween, a push button element biased to move into a position to effect separation of said contact fingers, a current responsive latching mechanism for maintaining said push button element in position to permit engagement of said contact fingers, said latching mechanism including an electric heater to be connected in the circuit to be protected, and a fusibly mounted member carried by said push button element and releasable under the action of said heater to trip said latching mechanism, said fusibly mounted element being located adjacent said heater upon setting of said latching mechanism and being movable away from said heater for quick cooling thereof upon tripping of said latching mechanism, and an ambient temperature compensating device associated with said latching mechanism for adjusting said fusibly mounted member with respect to said heater upon setting of said latching mechanism.

2,310,532
FASTENING AND LOCATING DEVICE
Charles T. Langmaid, Detroit, Mich.
Application November 15, 1941, Serial No. 419,266
4 Claims. (Cl. 85—32)



1. A fastening and locating device comprising a threaded element secured to a plate-like member, a removable plug of softwood or other destructible material in said threaded element, said plug having a portion extending beyond the surface of said plate, and an apertured member welded to said plate-like member, the aperture of said member being in engagement with the extended portion of said plug, said plug being adapted to be driven from said threaded element after said apertured member and said plate-like member are welded together.

2,310,533
PAINT BRUSH RACK
Hjalmar R. Lindell, Worcester, Mass.
Application April 22, 1941, Serial No. 389,697
6 Claims. (Cl. 211—65)

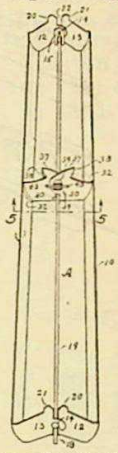


3. A rack comprising a pair of elongated supports each having means for removable attachment to opposite sides of a container, said supports being adapted to extend vertically upwardly from said sides, a sleeve slidable on each support, an elongated element on each sleeve extending transversely of said supports and adapted to at least partially extend across said container, cooperating guide means on said elements whereby the latter form an extensible cross bar, movable means on said sleeves adapted to lock said cross bar in vertically adjusted position on said supports, and means on said cross bar for holding paint brushes or the like.

2,310,534
INCUBATING AND HATCHING TRAY AND CAGE
George T. Markey, Fort Atkinson, Wis., assignor to James Manufacturing Company, Fort Atkinson, Wis., a company of Wisconsin
Application August 16, 1940, Serial No. 352,875
7 Claims. (Cl. 119—43)

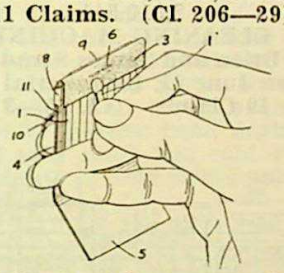
1. An egg case of the class described, comprising two side members having overlapping end members which are hingedly connected together and having a center bar positioned whereby when

the side members are in their operating position, means are provided for the reception of two rows of eggs, longitudinally central brackets hinged together similarly to said end members and having normally spaced apart upwardly projecting



portions and a spring adapted to yieldingly hold the side members in operating position and whereby by manually pressing said projections together, said side members at their lower edges will be moved apart and the eggs released downwardly.

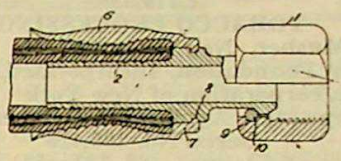
2,310,535
MATCH PACKAGE
George D. Martin, Olympia, Wash.
Application December 18, 1939, Serial No. 309,769
11 Claims. (Cl. 206—29)



1. A match book package, comprising a match card including a base having match splints projecting individually from one edge of such base, a match scratching surface at one side of said base, a plurality of stiff, complemental finger engaging strips, means integrally interconnecting said strips at one end and disposed alongside said base at the side thereof opposite said scratching surface, and means holding together said strip interconnecting means and said card base in such relationship, said strips extending from said strip end interconnecting means alongside said match splints substantially to the tip ends thereof, and being spaced apart transversely to engage opposite sides of a user's finger, thereby to clamp the finger for supporting the match book package therefrom.

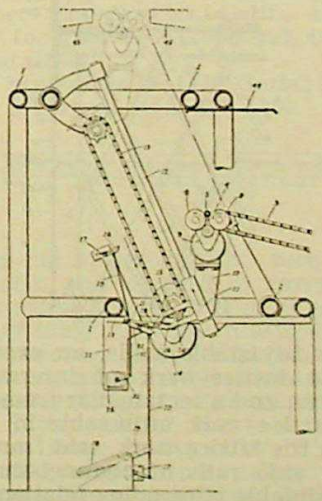
2,310,536
METHOD OF CONNECTING HOSE COUPLING COMPONENTS
Walter Arthur Melsom, Willesden Junction, London, England, assignor to Bowden (Engineers) Limited, London, England, a British company
Application May 21, 1940, Serial No. 336,368
In Great Britain April 11, 1940
3 Claims. (Cl. 29—148)

1. The method of producing a flexible hose coupling component suitable for use with medium or high pressure hose comprising a circumferentially continuous sleeve, a separately formed insert adapted to cooperate with junction mechanism, and a flexible hose gripped between such sleeve and insert which consists in first forming said sleeve with an externally raised annular wall portion at one end and then forming the insert with a complementary formed annular cavity in the exterior surface, assembling the sleeve, insert, and hose end, contracting the portion of the sleeve with the annulus by radially moving means engaging the raised annulus forcing part of the



metal in said raised end portion of the sleeve to flow radially inward and to fill the annular cavity in the insert with metal, the metal so displaced from the inner surface of the sleeve being replaced by the flow of the metal from said annular portion and thereby forming a substantially cylindrical exterior surface on said sleeve at the region of union, and while holding the parts in assembled relation with said radially moving means, contracting the sleeve by radial pressure around the hose to grip the hose firmly between the sleeve and the insert.

2,310,537
APPARATUS FOR HANDLING GLASS TUBING
James Morrison, San Francisco, Calif.
Application February 2, 1940, Serial No. 316,962
11 Claims. (Cl. 49—58)



1. In an apparatus for use in connection with the bending of glass tubes, a tube supply arranged to support the tubes horizontally, an elevator spaced from the supply and arranged to engage and elevate a single tube in a horizontal position, a traveling conveyor leading from the supply to the elevator and arranged to support a plurality of tubes in spaced order, controlled instrumentalities to intermittently drive the conveyor and elevator arranged so that as the latter reaches its lowermost position, the conveyor will deposit a tube thereon and means positioned to preheat said deposited tube and also the adjacent tube on the conveyor as long as said conveyor and elevator are stationary.

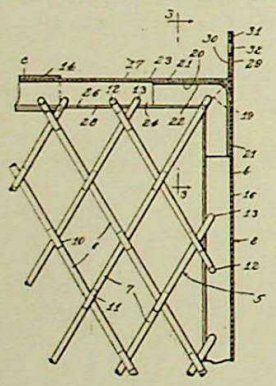
8. In a tube handling apparatus, an elevator to engage and support a single tube and elevate

the same a predetermined distance from a predetermined low portion, drive means for the elevator comprising an electric motor, a switch in the circuit of the motor, manual means to close the switch and means functioning only upon arrival of the elevator to said low position to open the switch whereby when the switch is closed the motor will function to lift and again lower the elevator for its full travel.

2,310,538
TOBACCO PROCESSING
Sidney Musher, New York, N. Y., assignor to Musher Foundation, Incorporated, New York, N. Y., a corporation of New York
No Drawing. Application October 7, 1939, Serial No. 298,425
6 Claims. (Cl. 131—17)

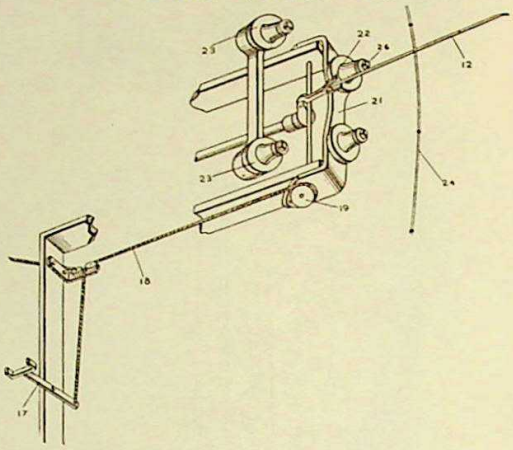
4. An improved tobacco having enhanced smoking properties and reduced bitter characteristics, said tobacco having been surfaced with a relatively small proportion, less than 2%, of a non-flavoring material selected from the deoiled, unroasted group consisting of sesame and peanuts and their water and alcohol soluble extracts.

2,310,539
ADJUSTABLE GRILLE
Raymond S. Nelson and Andrew F. Wintercorn, Rockford, Ill., assignors, by mesne assignments, to The Atwood Vacuum Machine Company, Rockford, Ill., a copartnership composed of Seth B. Atwood and James T. Atwood
Application August 20, 1940, Serial No. 353,406
7 Claims. (Cl. 20—71)



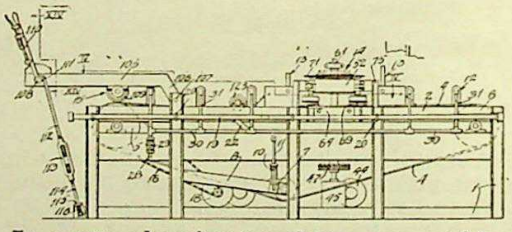
1. In an adjustable grille, an expansible and contractible lattice-work of interwoven crisscrossed wires, and a rectangular frame surrounding said lattice-work adjustable in length and width with the lattice-work, said frame comprising hollow side rails of channel-shaped cross-section in slidable telescoping relation on all four sides of the frame with the web portion of all of said channel-shaped rails outermost and having inwardly bent flanges on the edges of the side walls of the channel section defining a longitudinal slot to receive the lattice-work, whereby the frame is slidably attached to the edges of said lattice-work, and semi-rigid elbow members fitting inside the channels of the side rails at the corners of the frame and secured thereto for semi-rigidly connecting the adjacent ends of said rails at said corners so that angular adjustments of the adjacent ends of said rails either way from a normal 90° relation incident to adjustment of the grille is limited by the give of said semi-rigid elbow members at the corners of the frame whereby to prevent injurious distortion of the lattice-work.

2,310,540
CORN PLANTER
Park Lester Newbold, Cedar Rapids, Iowa
Application March 20, 1941, Serial No. 384,297
1 Claim. (Cl. 111—48)



In combination, a check wire holding roller assembly movable about a pivot axis, a lever guide arm engaged thereto, a roller mounted on the pivot axis of the assembly, a cable passed over the roller and fixed to a point on the assembly spaced from the pivot axis so that a pull on the cable will impart a swinging movement of the roller assembly with a corresponding raising of the lever arm.

2,310,541
CLEANING MACHINE
James J. O'Brien and James Strad, Chicago, Ill.
Application June 21, 1939, Serial No. 280,254
18 Claims. (Cl. 68—3)



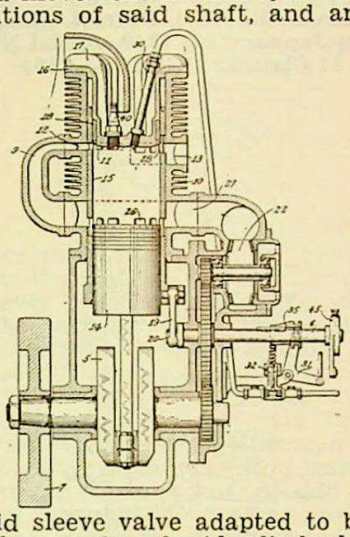
1. In a rug cleaning machine, a movable conveyor in the form of a moisture-proof belt arranged to carry a rug entirely through the machine, translatable and rotatable scouring means to act on the rug, and holding means over which said scouring means may travel to keep the rug flatly on the belt in the region of said scouring means.

17. In a rug cleaning machine, conveyor means to carry a rug through the machine, a plurality of washing brusnes arranged to travel in series transversely across the machine in reaches spaced longitudinally of said conveyor means, brush combing means disposed at opposite sides of said conveyor, and a slidable member associated with each of said combing means movable inwardly to overlie the margin of the rug on said conveying means, said slidable members being arranged so that one is in each of said spaced brush reaches.

2,310,542
INTERNAL COMBUSTION ENGINE
Alden E. Osborn, Mount Vernon, N. Y.
Application August 23, 1940, Serial No. 353,800
4 Claims. (Cl. 123—75)

1. In a four cycle internal combustion engine

which has a cylinder, an inlet and an exhaust passage thru the wall of said cylinder, a means for supplying air under pressure to said inlet passage, a piston, a longitudinally movable sleeve valve in said cylinder and extending between said cylinder and said piston, a re-entrant head extending into said sleeve valve, a shaft rotated by the movement of said piston, a means whereby said sleeve valve is given one complete outward and inward movement in said cylinder for each two revolutions of said shaft, and an exhaust



port in said sleeve valve adapted to be opened and closed by an edge of said cylinder head when said sleeve valve is given its said movements in relation to said piston, a port thru said sleeve valve near the upper end thereof adapted to be opened by an edge of said cylinder head, to be closed by an edge of said cylinder wall at said inlet passage and to be again opened by said cylinder wall edge and to be again closed by said edge of said cylinder head during each two revolutions of said shaft and said outward and inward movements of said sleeve valve.

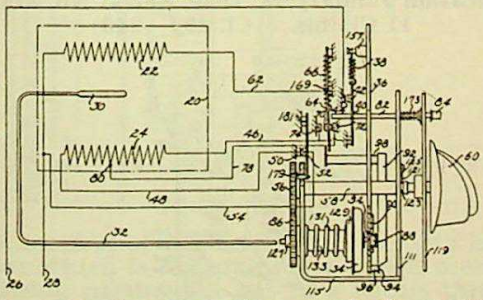
2,310,543

DOMESTIC APPLIANCE

George C. Pearce, Dayton, Ohio, assignor to General Motors Corporation, Dayton, Ohio, a corporation of Delaware

Application February 28, 1941, Serial No. 381,193

10 Claims. (Cl. 74—1)



1. A control comprising a single operating means, a first control device, a second control device, a lost motion operating connection between the operating means and the first control device for operating the first control device after the completion of the lost motion movement, means operated by said operating means during said lost motion movement for operating said second control device, adjusting means for varying the operative relationship between the operating means and the first control device, setting means for setting said second control device, and common means for operating said adjusting means and said setting means.

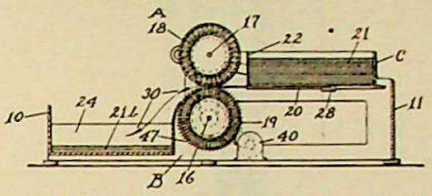
2,310,544

VOTE COUNTING MACHINE

John H. Randolph, Great Bend, Kans.

Application October 21, 1939, Serial No. 300,609

1 Claim. (Cl. 235—56)



In a machine for counting votes designated in a ballot card by perforations in the card and in candidate name carrying spaces defined on said card; a drum having a plurality of registers therein, one register for each candidate space defined on said ballot card, each register having means exposed at the face of the register carrying drum for actuating the register, a second drum, said second drum having yieldable means therein that is engageable with the register actuating means for the movement thereof to register a count on the register, said ballot card being passable between said drums and functioning to prevent engagement of the yieldable means in the second said drum with the register actuating means in the first said drum except in such places as the ballot card is perforated, said perforations in the ballot card functioning to permit the passage of the yieldable means therethrough to engage and move the register actuating means to register a count on each register respective to each perforation in the ballot card.

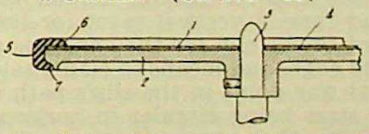
2,310,545

SOUND RECORD CARRIER

Frank Rieber, Los Angeles, Calif., assignor to Memovox, Incorporated, Cleveland, Ohio, a corporation of Ohio

Application September 19, 1939, Serial No. 295,612

2 Claims. (Cl. 274—39)



2. A thin flat, phonographic record in the form of a disk, and adapted to carry a record groove progressing toward the outer edge of the disk, a rotary table upon which said disk is supported, and means coupling said table and disk in such manner as to obviate relative angular movement between them, while permitting said disk to be flattened over the table surface in response to a force acting outwardly, radially from the center, comprising a resilient rim member overlapping the edges of the table and the disk.

2,310,546

VELOCITY MEASURING DEVICE

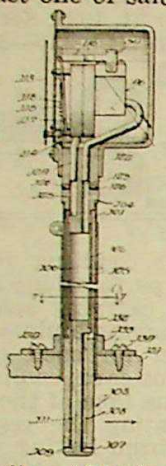
Claude L. Robinson, Michigan City, Ind., assignor to Consolidated Instruments Corporation, Michigan City, Ind., a corporation of Indiana

Application May 3, 1940, Serial No. 333,206

5 Claims. (Cl. 73—205)

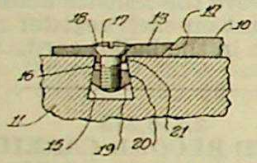
1. A differential indicating device for indicating the rate of flow of a fluid, comprising a pair of walled receptacles disposed in spaced relation with the walls of both forming one chamber and the wall of one a second chamber, closure means for sealing said chambers, a foot carried by at least one of said receptacles and adapted to be positioned in the fluid, said foot having oppositely

disposed ports therein communicating with the respective chambers, a differential indicating unit carried by at least one of said receptacles at the



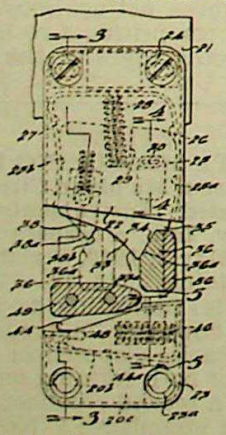
end thereof opposite said foot, said indicating unit being operatively connected to the upper portions of the respective chambers.

2,310,547
PRINTING PLATEHOLDER
Siegmund J. Roesner, Oak Park, Ill.
Application June 6, 1940, Serial No. 339,165
1 Claim. (Cl. 101—387)



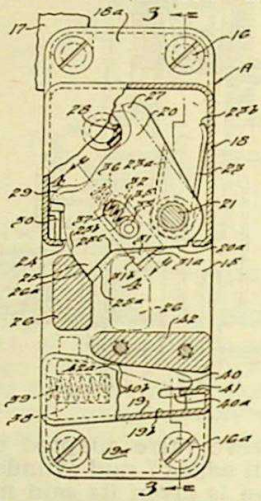
A clamp for a printing plate laid on a base formed with grooves, comprising a clip formed to engage an edge of the printing plate, a stem depending from the clip into one of said grooves to guide the clip for sliding motion along the groove and form a vertical pivot for the rotary adjustment of the clip for the engaging application to said edge, and means to clamp said clip to the base at any point in the clip's path of rotation, said stem being circular in horizontal section and filling the entrance to the groove with a sliding fit.

2,310,548
DOOR LATCH
John H. Roethel, Detroit, Mich.
Application January 22, 1940, Serial No. 314,991
15 Claims. (Cl. 292—340)



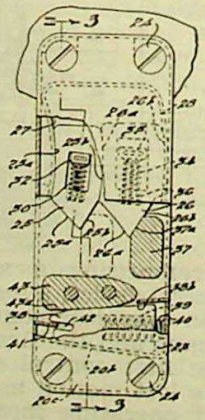
1. A striker device for use in cooperation with a latch bolt and in association with a swinging door hinged at one edge to a frame structure, comprising a casing, a striker member slidable on the casing in an up and down curvilinear path, and yieldable bolt latching step carried by said member and normally projecting into the path of the bolt.

2,310,549
DOOR LATCH
John H. Roethel, Detroit, Mich.
Application January 22, 1940, Serial No. 314,992
27 Claims. (Cl. 292—340)



1. A striker or keeper device for use in cooperation with a latch bolt and in association with a swinging door hinged at one edge to a frame structure, comprising a casing, a striker member mounted on the casing for up and down movement and having a bolt latching step extending into the path of the bolt, yieldable means urging said step into the path of the bolt, and yieldable wedging means engageable by a member on the door and movable in a path approximately parallel to the path of the bolt for tightening the bolt against said striker step.

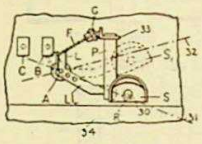
2,310,550
DOOR LATCH
John H. Roethel, Detroit, Mich.
Application January 22, 1940, Serial No. 314,993
11 Claims. (Cl. 292—340)



1. A striker device for use in cooperation with a latch bolt and in association with a swinging door hinged at one edge to a frame structure, comprising a pair of members having bolt latching steps normally projecting into the path of the bolt and spaced apart in the direction of closing of the door, means for mounting said members

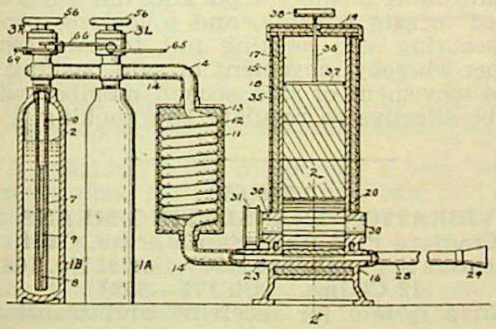
for up and down movement relatively to the bolt and each member relatively to the other, spring means urging each striker member toward the bolt, and yieldable wedge means associated with the striker members and cooperable therewith to hold the door against vertical movement.

2,310,551
THROTTLE ACTUATING DEVICE
George A. Rubissow, New York, N. Y.
Application January 17, 1940, Serial No. 314,224
9 Claims. (Cl. 74—513)



1. A device for actuating the accelerator pedal mounted on the floor of a motor vehicle, comprising a lever pivotally mounted upon an axle substantially perpendicular to the said floor, a flexible connection, one end of which is connected with the said accelerator pedal, the other end of which is connected with an appropriate part of one end of the said lever, said flexible connection passing through at least one guide-means rigidly affixed in respect to the said floor in the proximity of the said pedal, the other end of the said lever being provided with a shoe-support member pivotally mounted thereon, whereby when the foot of the driver contacts the said shoe-support member and moves it to and fro, the said lever automatically pivots substantially parallel to the floor and automatically actuates the said accelerator pedal through the intermediary of the said flexible connection.

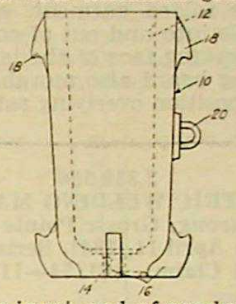
2,310,552
FIRE EXTINGUISHING METHOD AND MEANS
George Schaaf, Buffalo, N. Y.
Application August 15, 1941, Serial No. 407,029
20 Claims. (Cl. 169—11)



1. A method of extinguishing a fire by a liquefied gas which is maintained at a high pressure, comprising passing the gas in a stream through stages of expansion to a pressure above the triple point, shaving dry ice to a snow, introducing said snow into said stream and discharging said stream of fluid and snow onto a fire.

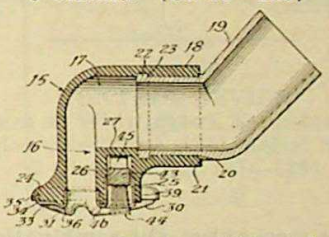
2,310,553
INGOT MOLD
William W. Schofield, Hubbard, Ohio, William Owen, Pittsburgh, Pa., and John Bidner, Youngstown, Ohio
Application March 12, 1942, Serial No. 434,314
8 Claims. (Cl. 22—139)

1. A mold having a cavity for casting a steel ingot with the big end up and characterized by having the mold wall thickness greatest at the



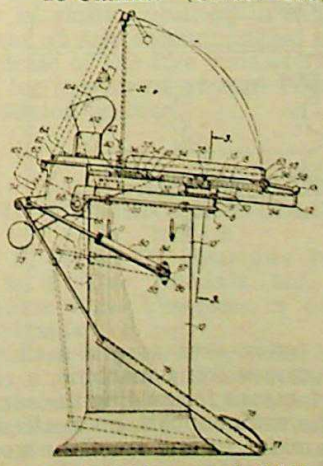
large end of the ingot and of gradually decreasing thickness towards the small end of the ingot.

2,310,554
SUCTION NOZZLE
Arthur W. Seyfried, Racine, Wis., assignor to Scovill Manufacturing Company, Waterbury, Conn., a corporation of Connecticut
Application October 18, 1941, Serial No. 415,549
6 Claims. (Cl. 15—158)



1. A suction nozzle comprising a body of elastic material provided at its underside with a pair of closely adjacent suction and brush-containing surface cleaning slots extending thereinto, a friction floor plate of non-elastic reinforcing material for said nozzle having a pair of slots corresponding to and registering with those of the body, a pair of closely adjacent walls extending inwardly from said plate between the slots in the body and plate and embracing the elastic material of the body extending between the slots of the body, and a further wall extending inwardly from said plate parallel to the most adjacent of said pair of walls and cooperating therewith to provide brush guiding surfaces on opposite sides of the brush-containing slot in the body.

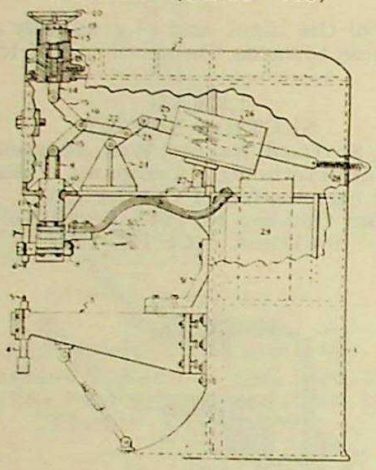
2,310,555
GARMENT FINISHING AND FOLDING APPARATUS
James W. Steele, North Kansas City, Mo.
Application September 7, 1940, Serial No. 355,752
13 Claims. (Cl. 38—103)



1. Garment finishing and folding apparatus

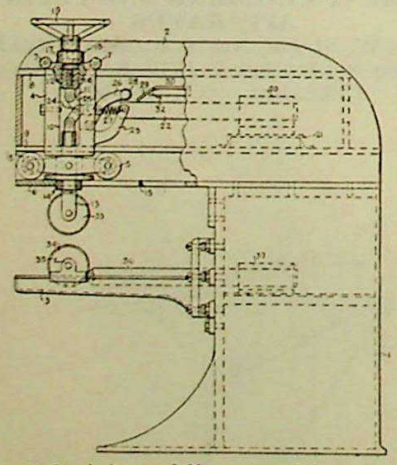
comprising, a table provided with a collar recess and guide pieces spaced apart approximately the width of the folded garment, a garment fold board movable into and out of cooperative relation to the working face of the table, and a garment finishing board also movable into and out of operative position overlying said fold board.

2,310,556
ELECTRIC WELDING MACHINE
George F. Strong, Grosse Pointe Farms, Mich.
Application April 11, 1941, Serial No. 388,051
1 Claim. (Cl. 74—110)



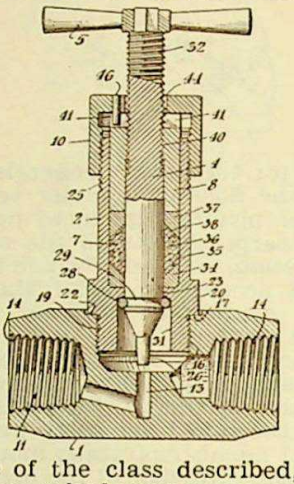
In a toggle mechanism, the combination with a pair of toggle links having pivotally joined ends, of an anchorage member pivotally mounting the other end of one of said links, a plunger pivoted to and actuable by the other end of the other link, an arm pivoted to swing in the approximate plane of the links, a link for varying the divergency of the toggle links, extending from said arm to the juncture of the toggle links, a bar pivoted to said arm and reciprocatory to actuate the arm and a support for said bar pivotal to compensate for swinging of the arm.

2,310,557
ELECTRIC SEAM WELDING MACHINE
George F. Strong, Grosse Pointe Farms, Mich.
Application April 11, 1941, Serial No. 388,052
8 Claims. (Cl. 219—4)



1. In an electric welding machine, a carriage, a work support, means for guiding the carriage in travel along the work support, an electrode movable on the carriage to and from the work support, means for shifting the carriage along its guide means, and a mechanism actuable by said shifting means for moving the electrode toward the work support.

2,310,558
VALVE
Wilbur O. Teeters, Cresskill, N. J., and Donald B. Salmon, New York, N. Y., assignors to Hoke Incorporated, New York, N. Y., a corporation of New York
Application December 16, 1939, Serial No. 309,534
10 Claims. (Cl. 251—50)

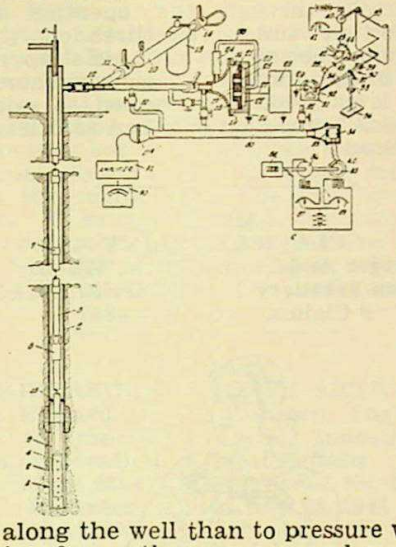


1. A valve of the class described, comprising, in combination, a body having an aperture therein for guiding the passage of a fluid, a housing secured to said body for containing fluid controlling means, a member in said housing adapted to be moved to control the effective size of the aperture in said body and the passage of fluid therethrough, means on said member for adjustably supporting said member, packing extending about said controlling member adapted to minimize passage of fluid along said member, a second member in said housing having means thereon adapted to cooperate with the controlling member supporting means to adjustably support the controlling member, a packing nut adjustably secured to said housing, and a locking projection securing said packing nut to said second member whereby movement of said packing nut causes movement of said second member which may be effective to regulate the packing.

2,310,559
VIBRATION TRANSLATING MEANS
Cranford P. Walker, San Marino, Calif.
Application September 18, 1937, Serial No. 164,534
12 Claims. (Cl. 177—352)

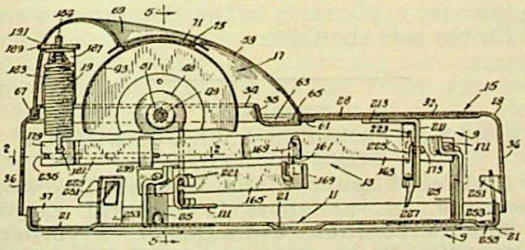
5. In a system for receiving and translating pressure echoes from a well, a microphone adapted to translate pressure variations impinging thereon to corresponding impedance variations, means coupling said microphone to said well to expose said microphone to gas pressure in the well, a circuit including a source of alternating current of a frequency many times greater than the frequency of the echoes desired to be translated, said circuit including said microphone so disposed therein as to vary the impedance of said circuit and to thereby vary said alternating current in accordance with the pressure variations impinging on said microphone, means coupled to said circuit and responsive to variations of said alternating current in said circuit for describing an observable wave pattern reproduction of the pressure variations in said well, elec-

trical echo accenting means interposed between said microphone and said last named means for causing said system to respond more readily to periodically recurring echoes from a series of similar obstructions spaced substantially uni-



formly along the well than to pressure variations emanating from other sources, and means associated with said accenting means and operable at will for imposing said accenting means upon said system or for removing the effect of said accenting means from said system.

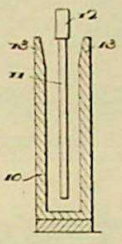
2,310,560
WEIGHING SCALE
Mathias J. Weber and Russell E. Vanderhoff, Chicago, Ill., assignors to Continental Scale Corporation, Chicago, Ill., a corporation of Delaware
Application August 30, 1938, Serial No. 227,493
36 Claims. (Cl. 265—68)



5. A weighing scale comprising a base, weighing mechanism supported on said base and comprising a system of levers fulcrumed on said base, counterbalancing means on which said system of levers is yieldingly suspended, and a weight receiving platform supported by said levers, said platform comprising a shell of formed sheet material, a rigidifying bridge rigidly secured on and within said shell, bearing means on said bridge for supporting the platform on said levers, and an indicator comprising a rotatable element journaled in bearing means on said bridge.

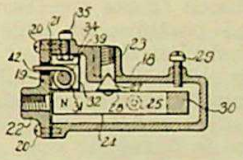
2,310,561
ANODE
Marshall G. Whitfield, Knoxville, Tenn., assignor to Reynolds Metals Company, New York, N. Y., a corporation of Delaware
Original application February 17, 1937, Serial No. 126,286. Divided and this application October 26, 1938, Serial No. 237,152
1 Claim. (Cl. 204—280)

As an article of manufacture, a combined electrolyte container and electroplating anode for use in the electrodeposition of iron and for consumption during the plating operation, including a relatively long narrow cast iron tank having relatively thick walls and a depth suitable for the suspension of a sheet-like cathode in the



electrolyte contained in said tank and a width approximately equal to four inches plus the thickness of the cathode, said tank having its walls reduced in thickness above the level to be assumed by the electrolyte therein to minimize overhanging edges as the iron of the anode is consumed.

2,310,562
CONTROL DEVICE
James A. Whittington, Evanston, Ill.
Application January 2, 1941, Serial No. 372,760
2 Claims. (Cl. 137—139)

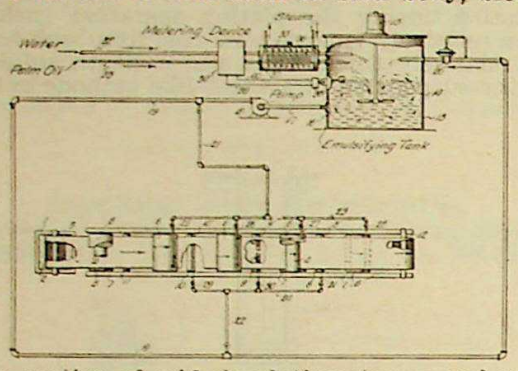


1. A control device comprising a casing having means defining an inlet at one end of the casing and having means defining a side outlet in a side wall of the casing, a U-shaped permanent magnet in said casing having its free ends adjacent said inlet, a valve member seated on the two limbs of said permanent magnet and in aligned relation to said outlet, spaced opposed pivot pins on said casing engaging said limbs at points intermediate said valve member and the closed end of the magnet for normal swinging movement of said valve member away from said outlet to open said outlet, a second magnet in said casing and disposed facing the free ends of said permanent magnet to normally attract said free ends for holding said valve member in closing position in said outlet, and coil means on said second magnet energizable to effect release of the free ends of the permanent magnet for movement of said valve member to outlet-opening position.

2,310,563
METHOD OF LUBRICATING COLD REDUCING MILLS
William P. Wilke, III, Sparrows Point, and De Marr M. Erskine, Dundalk, Md., assignors to Bethlehem Steel Company, a corporation of Pennsylvania
Application May 13, 1940, Serial No. 334,756
8 Claims. (Cl. 80—60)

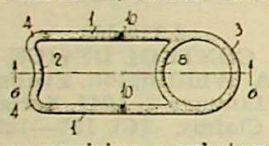
1. A method of lubricating steel rolling mills in the cold reduction of steel including the steps of forming a body of an emulsion of a lubricant and water, circulating said emulsion from said

body around a closed circuit adjacent the mill to be lubricated and back to said body, bleed-



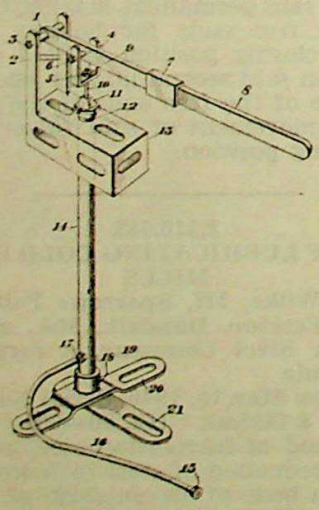
ing a portion of said circulating stream and supplying it to the mill to be lubricated.

2,310,564
PESSARY
Earl L. Younkins, South Nyack, N. Y.
Application March 31, 1941, Serial No. 386,135
11 Claims. (Cl. 128—127)



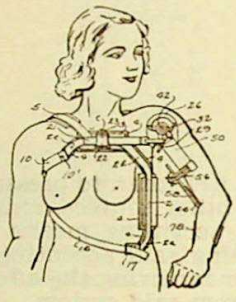
1. A pessary comprising a substantially oblong shaped continuous frame member, the side portions and end portions of which are flexible throughout their length, each of said side portions being provided with an angle intermediate its length, whereby when the ends of the frame member are subjected to endwise compression, the said frame is flexed in such a way that its ends are brought closer together on that side only of the frame opposite to which the apex of the angles project, said pessary being adapted to be held in place between the posterior fornix and the pubic bone by the tendency of the frame member to extend after having been compressively flexed.

2,310,565
AUTOMOBILE TIRE FORCE PUMP
Oliver John Allison, New Orleans, La., assignor of one-half to O'Neal August Diaz, New Orleans, La.
Application November 3, 1941, Serial No. 417,717
2 Claims. (Cl. 230—220)



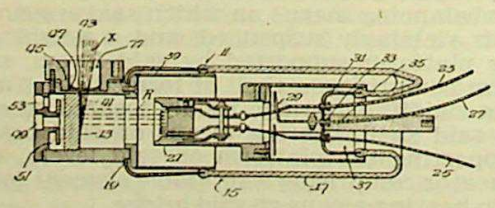
1. An air pump comprising a base, a pump cylinder supported on said base, an inlet and an outlet valve for said cylinder, a piston in said cylinder, a piston rod attached to said piston, a support having a box like shape having openings in its bottom and top portions, said cylinder passing freely through the opening in the bottom portion and screw-threaded through the opening in the top portion, said support having a pair of upstanding lugs secured thereto, an operating lever pivotally attached to said lugs, and a pivotal connection between said lever and said piston rod.

2,310,566
CLAVICLE SPLINT
Roger Anderson, Seattle, Wash.
Application February 7, 1939, Serial No. 255,075
9 Claims. (Cl. 128—84)



2. A splint of the character described, comprising a body harness adapted to be fitted to and functionally fastened to the body of the patient being treated, a pair of levers mounted by said harness at front and back side of the body and extending laterally to the region of the shoulder at the side of the body containing the injury, an extension link hingedly mounted on each lever, and a hammock pivotally suspended by and between the outer ends of said extension links for application to the arm pit as a support for the said shoulder.

2,310,567
X-RAY APPARATUS AND METHOD OF CONSTRUCTION
Zed J. Atlee, Elmhurst, and Howard Brackney, Evanston, Ill., assignors to General Electric X-Ray Corporation, Chicago, Ill., a corporation of New York
Application January 8, 1941, Serial No. 373,630
10 Claims. (Cl. 250—147)



1. An X-ray generator comprising an evacuated casing having a portion formed with a window opening, means for generating X-rays within said casing for transmission therefrom through said opening, means forming a sleeve on and extending outwardly of said casing and forming, thereon, an outwardly opening pocket having said window opening at the bottom thereof, and a plate of beryllium sealed at its edges on said sleeve in vacuum tight fashion, said plate being positioned to permit the passage of generated X-rays therethrough.

2,310,568

METHOD OF JOINING MATERIALS

Zed J. Atlee, Elmhurst, and Howard Brackney, Chicago, Ill., assignors to General Electric X-Ray Corporation, Chicago, Ill., a corporation of New York

No Drawing. Original application January 8, 1941, Serial No. 373,630. Divided and this application June 6, 1941, Serial No. 396,866
14 Claims. (Cl. 113—112)

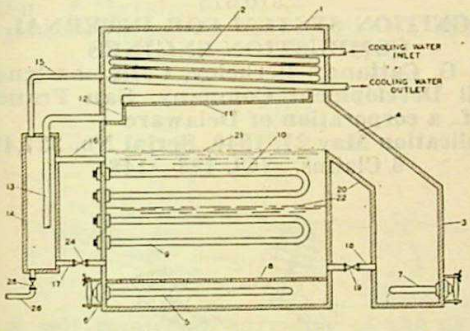
1. The method of joining a beryllium member to a base member of metal other than beryllium, which comprises forming a brazed metal joint between the members by melting, between the members, a brazing alloy comprising copper which, when molten, goes into solution relatively rapidly with beryllium, and silver which, when molten, goes into solution relatively slowly with beryllium.

2,310,569

DEGREASING OF METAL ARTICLES

William Edward Booth, Runcorn, England, assignor to Imperial Chemical Industries Limited, a corporation of Great Britain

Application May 29, 1942, Serial No. 445,040
In Great Britain July 18, 1941
12 Claims. (Cl. 141—1)



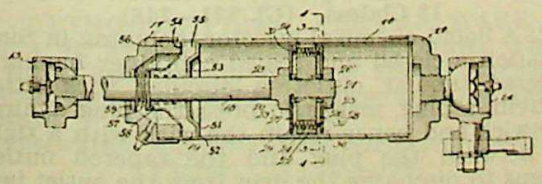
1. In a process for degreasing metal and like non-porous articles with a bath of a liquid chlorinated aliphatic hydrocarbon solvent capable of forming with water an azeotrope containing a major proportion of the former which azeotrope has a boiling point below that of water, the steps for removing solvent from such articles which have been treated in the solvent bath which comprise maintaining on the surface of the solvent a layer of water of substantial depth, maintaining the water layer at a temperature below its boiling point but above that of the boiling point of the azeotrope, maintaining above the water layer a mixture of water vapour and solvent vapour substantially in azeotropic proportions, and withdrawing articles treated in the solvent bath through the water layer so as to vaporize solvent carried up with the articles as a binary azeotrope with water.

2,310,570

STABILIZER

Merton B. Briggs, Pittsburgh, Pa., assignor to I. A. Simon, Pittsburgh, Pa.

Application October 30, 1937, Serial No. 172,034
26 Claims. (Cl. 280—90)



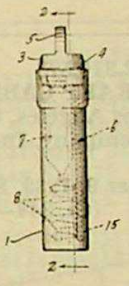
1. A stabilizer of the type described having a cylinder adapted to contain a fluid and a piston adapted to reciprocate therein, said piston means comprising a head provided with openings, said head being mounted adjacent the end of the piston rod and having disks mounted on opposite sides thereof, said disks being provided with a plurality of arms that cooperate with said openings to control the flow of fluid through said head, said arms being adapted to permit free flow under normal flow conditions and to cut off flow under the conditions existing when an abnormal shock is encountered, and said arms being thermally responsive to compensate for viscosity changes of the contained fluid.

2,310,571

TOOTHBRUSH PACK

John W. Brady, Los Angeles, Calif.

Application September 12, 1941, Serial No. 410,555
4 Claims. (Cl. 132—84)



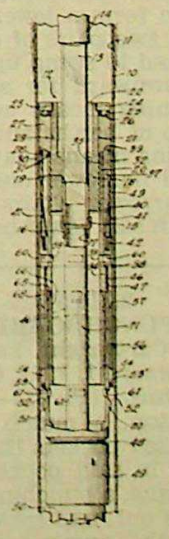
1. In a toothbrush pack, the combination of a tubular case, a reversible head normally closing the end of said case, a stem secured in said head at an eccentric point and extending into the interior of the case adjacent the wall thereof, having an elongated resilient loop open at one end, a brush having a back with a groove engaging the said loop to secure the brush to the free end of said stem, with its bristles projecting toward the axis of the case, and a toothpaste tube held in the case between the bristles and said head.

2,310,572

BY-PASS TYPE LINER HANGER

Erwin Burns, Los Angeles, Calif.

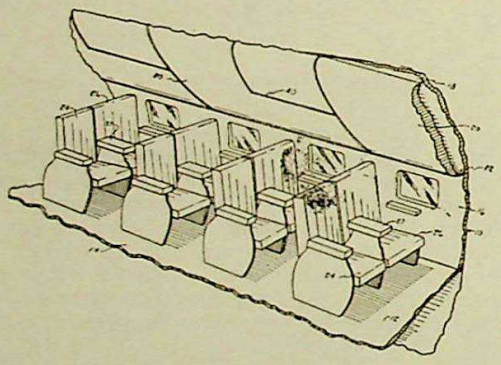
Application September 26, 1941, Serial No. 412,370
8 Claims. (Cl. 166—12)



1. A liner hanger of the by-pass type, compris-

ing an elongated cylindrical sleeve from which a liner may be suspended, an expansible packer carried upon said sleeve, a slip barrel mounted on the sleeve, slips carried thereby to engage the wall of a casing, an inner cylindrical body within the sleeve and slidable longitudinally thereof, releasable supporting means holding the body and the sleeve against relative movement, ports through the sleeve at opposite sides of the packer adapted to be open when the body and sleeve are in said held position, ports through the wall of the body and the slip barrel adapted to register when the sleeve ports are opened and to close when the sleeve ports are closed, means associated with said holding means whereby the slips will be held in their retracted positions until the body has relative movement with relation to the sleeve, and engaging means between the body and the sleeve acting upon relative movement between the sleeve and the body to lock the sleeve and the body together and to cause an expansive pressure to be imposed upon the packer.

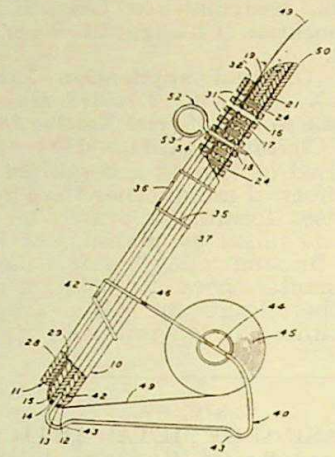
2,310,573
AIRCRAFT CABIN
Edward F. Burton, Los Angeles, Calif., assignor to Douglas Aircraft Company, Inc., Santa Monica, Calif.
Application September 9, 1939, Serial No. 294,145
5 Claims. (Cl. 244—118)



1. In a sleeping arrangement for aircraft; a pair of chairs in side by side relation; one of said chairs being of greater width than the other; a similar pair of chairs in side by side relation and longitudinally spaced from said first pair of chairs; adjustable back and seat cushions on each of said wider chairs, said cushions being cooperatively movable to form a lower berth; an upper berth above said two pairs of chairs, said upper berth being hinged to swing upward for stowing purposes and downward for sleeping purposes; primary partitioning means adapted to enclose said entire group of berths and chairs, and secondary partitioning means adapted to singly enclose one of said narrower chairs, whereby the other of said narrower chairs is included in a compartment with said lower berth.

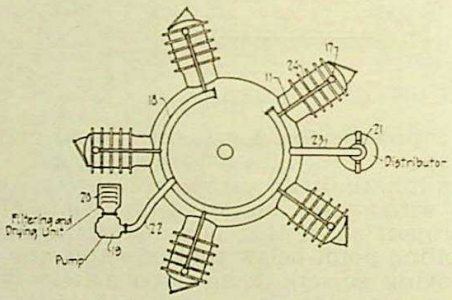
2,310,574
PUNCHBOARD
Oscar L. Cartwright, York, Nebr.
Application February 11, 1941, Serial No. 378,353
7 Claims. (Cl. 273—139)

1. In combination, a punch board having a plurality of enclosed pockets therein and indicia bearing members in said pockets adapted to be forced out therefrom, a punching device for forcing said members out, and means for automatically registering the number of such members forced out by any player and providing an individual record for each player of such number, said means comprising an element disposed ad-



jacent said pockets in the path of movement of the punching device.

2,310,575
IGNITION SYSTEM FOR INTERNAL COMBUSTION ENGINES
Alfred G. Cattaneo, Berkeley, Calif., assignor to Shell Development Company, San Francisco, Calif., a corporation of Delaware
Application May 27, 1940, Serial No. 337,416
5 Claims. (Cl. 123—148)

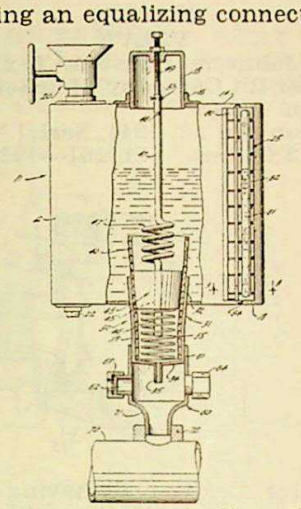


1. Ignition means for internal combustion engines comprising in combination a spark plug including a hollow central electrode closed toward the firing end, a cable leading from a source of high tension current to said spark plug, a harness enclosing said cable and means adapted to continuously pass a gaseous coolant under pressure into said harness and through said hollow central electrode of said spark plug.

2,310,576
CHEMICAL LIQUID PRESSURE INJECTOR
Eugene W. Dodge, Shafter, Calif., assignor of twelve and one-half per cent to Homer Rhyne and twelve and one-half to Chauncey Freemont Wentworth, both of Long Beach, Calif.
Application April 30, 1940, Serial No. 332,455
13 Claims. (Cl. 221—148)

2. A liquid chemical injector including in combination a closed and sealed container having a tapered tubular outlet, a circular wick fitted therein, a plug, means to press the plug against the wick and hence retain the wick with a tight fit between the plug and the tapered outlet, means to discharge the drip from the outlet into a structure having a gas under high pressure and

means forming an equalizing connection for such



high pressure gas communicating with the upper part of the container.

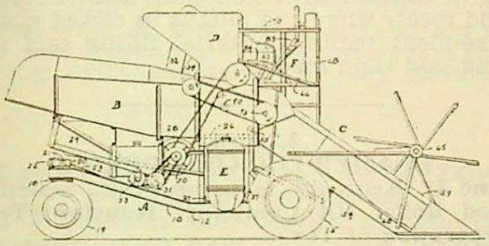
2,310,577

SELF-PROPELLED COMBINE-HARVESTER

Charles E. Everett, Racine, Wis., assignor to The Massey-Harris Company, Racine, Wis., a corporation of Maryland

Application April 10, 1942, Serial No. 438,494

3 Claims. (Cl. 56—21)



1. A self-propelled harvester of the class described, comprising a chassis frame having an axle housing mounted on the forward end thereof, said axle housing having axles and carrying and driving wheels, guiding and carrying means mounted on the rear end of said chassis, an upwardly extending transversely positioned supplemental frame mounted on said chassis frame a short distance in rear of said axle housing, a longitudinally positioned threshing unit mounted at its forward end on said supplemental frame, cutting and elevating devices mounted at their rear ends to the forward end of said threshing unit, an engine mounted within said supplemental frame and having operating connections to said thresher, cutting and elevating devices and the axles of said housing, said separator and elevating devices having a width somewhat less than the space between said driving wheels, said cutting device having a length somewhat greater than the overall width of said driving wheels, gathering means secured to the sides of said elevator and the overhanging ends of said cutting device and overhanging said driving wheels and adapted to move the extra width of grain cut toward and on the elevator.

2,310,578

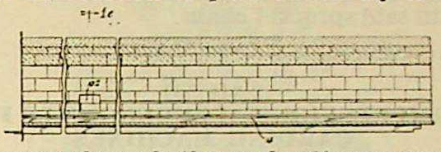
METHOD OF FIRING CERAMIC WARE

Albra H. Fessler and Arthur P. Watts, Flint, Mich., assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware

Application August 2, 1940, Serial No. 350,016

3 Claims. (Cl. 25—156)

1. The method of firing ceramic ware held together by a temporary oxidizable binder adapted to be driven off prior to the sintering or vitrefying of the ware comprising passing the ware successively through a preheating chamber, a firing chamber and a cooling chamber, subjecting the ware to the direct action of hot combustion gases in the firing zone, causing the products of combustion to pass outwardly from the



firing zone through the preheating zone to initially heat the ware and drive off the binder, said products of combustion constituting substantially the entire atmosphere in the preheating zone and further reducing the uncombined oxygen content in the preheating zone to prevent disruption of the ware by too sudden elimination of the binder.

2,310,579

CUTTING TOOL

Albert Forberg, Detroit, Mich., assignor to National Broach & Machine Company, Detroit, Mich., a corporation of Michigan

Application May 8, 1939, Serial No. 272,482

8 Claims. (Cl. 29—95.1)

2. A broach having a series of progressively stepped peripherally notched teeth, each of said notched teeth being followed by a continuous tooth of slightly less effective height than its corresponding notched tooth, and a following series of progressively stepped continuous teeth to finish a work piece to exact dimension.

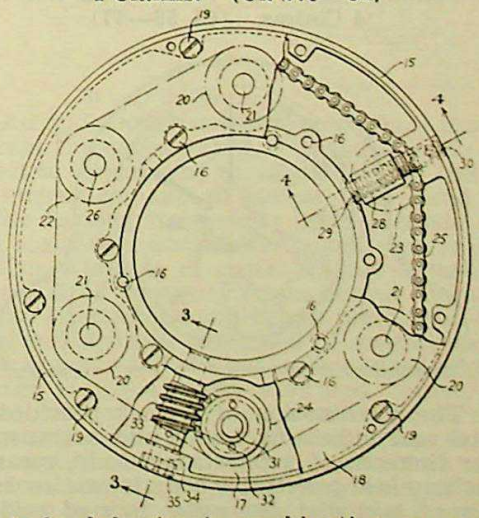
2,310,580

CHUCK

August J. Franke, Arlington, N. J., assignor to Standard Tool and Manufacturing Co., Arlington, N. J., a corporation of New Jersey

Application July 21, 1942, Serial No. 451,718

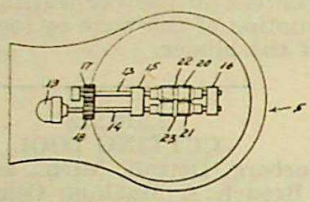
4 Claims. (Cl. 279—34)



1. A chuck having in combination, an annular body portion, a plurality of arms, studs extending through said body portion in the peripheral region thereof to carry said arms, forwardly extending work holders carried by the free ends of said arms, sprockets mounted on said studs in said

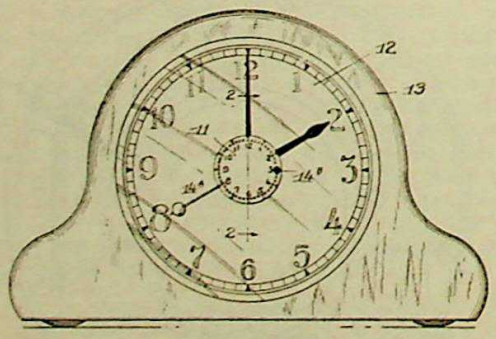
body portion to rotate said arms so as to move said work holders toward or away from the center of said chuck, a sprocket chain passing over said sprockets for moving same synchronously, means providing for the rotation of one of said sprockets, an idler sprocket mounted in said body portion, and means operable from the exterior of said body portion for moving said idler sprocket to take up slack in said sprocket chain.

2,310,581
COMPRESSION CALENDER ROLLS FOR CARDING MACHINES
John P. Garrett, Sr., Thomaston, Ga., assignor of one-third to John P. Garrett, Jr., Thomaston, Ga.
Application December 10, 1940, Serial No. 369,497
2 Claims. (Cl. 19—159)



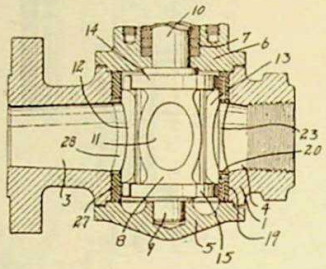
1. Means for compressing a length of silver formed in a carding machine and just before the sliver enters the coiler of the machine, such means comprising a pair of cylindrical rolls located above the coiler and placed in side by side contacting position in a horizontal plane, one roll having a circumferentially extending groove therein intermediate its ends shaped to receive the sliver and the other roller having a circumferentially extending rib thereon intermediate its ends for compressing the sliver in the groove the diameter of said one roll at the base of the groove and the diameter of the other roll at the periphery of the rib being equal and means for rotating the rolls at a uniform speed.

2,310,582
TIME INDICATOR FOR CLOCKS AND WATCHES
William T. Jefferson, Los Angeles, Calif.
Application October 31, 1941, Serial No. 417,241
4 Claims. (Cl. 58—57)



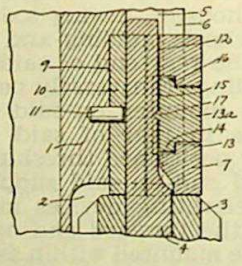
1. The combination of a clock provided with a dial and indicating hands and a transparent cover thereon, of a penetrable body, means for attaching said penetrable body to said cover centrally of said dial, the outer face of said body being provided with a circular series of time numerals and graduations corresponding in angular position with those on the clock dial, and a pointed indicator adapted to be inserted and held in said body at a position to indicate any desired time.

2,310,583
VALVE
Charles F. Johnson, Houston, Tex., assignor to Reed Roller Bit Company, Houston, Tex., a corporation of Texas
Application April 3, 1941, Serial No. 386,645
2 Claims. (Cl. 251—103)



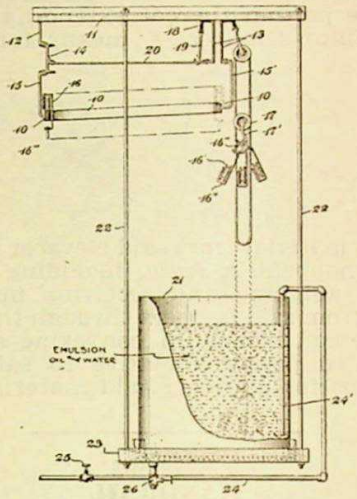
2. In a valve, a valve body having a bore therein and a port communicating with said bore, a plug in said bore having a passage therethrough and being rotatable to an open position in which the passage and port are in communication and to a closed position in which the passage and port are out of communication, the wall of said bore having a recess around said port, a rigid member in said recess surrounding said port and having an aperture therein of the same size as and registering with said port, the rigid member being in contact with said plug and the bottom of said recess when the plug is in closed position, and resilient sealing material filling said recess around said rigid member.

2,310,584
REAMER LOCKING DEVICE
Eugene D. Kennedy, Houston, Tex., assignor to Reed Roller Bit Company, Houston, Tex., a corporation of Texas
Application September 22, 1941, Serial No. 411,818
3 Claims. (Cl. 255—73)



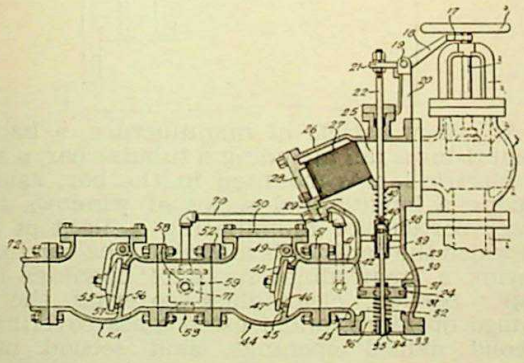
1. In a reamer, a body having a major recess therein and an auxiliary recess opening into each end of the major recess, said auxiliary recess having overhanging edges, and said body having a transverse slideway intersecting each of said auxiliary recesses, a roller cutter in said major recess, a supporting shaft extending through said cutter and having its ends disposed in said auxiliary recesses, a keeper block slidable in each of said auxiliary recesses and adapted to engage beneath said overhanging edges and to overlie said shaft ends, each keeper block having a slideway transversely thereof with overhanging edges said last mentioned slideway adapted to be aligned with said slideway in the body and being cut to provide an opening through the block to expose the shaft, and a wedge member having parts adapted to engage beneath said overhanging edges of the slideway and a surface inclined with respect to said parts to wedge against the shaft when the wedge member is forced in one direction.

2,310,585
METHOD OF TREATING MEAT TROLLEYS
Paul J. Lawson, Columbus, Ohio
Application January 2, 1941, Serial No. 372,930
6 Claims. (Cl. 184—1)



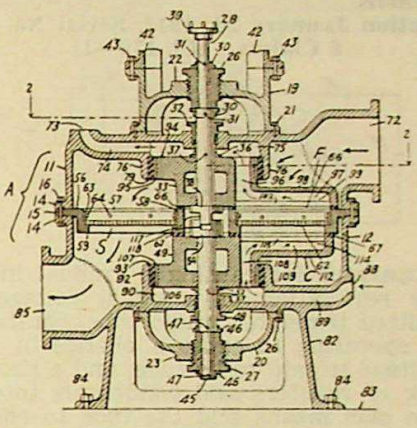
1. The method of cleaning and coating meat trolleys and the like which consists in immersing the trolleys in a bath containing a cleaning fluid non-miscible with oil and coating fluid of lower specific gravity, subsequently permitting the coating fluid to form in a layer on top of the bath, and thereafter raising the trolleys through the coating fluid after the cleaning operation.

2,310,586
MEANS FOR PREVENTING BACKFLOW IN PLUMBING SYSTEMS
John T. Lohman, Los Angeles, and Rowland L. Lohman, North Hollywood, Calif., assignors to Lohman Bros., Los Angeles, Calif., a corporation of California
Application April 26, 1940, Serial No. 331,800
2 Claims. (Cl. 137—78)



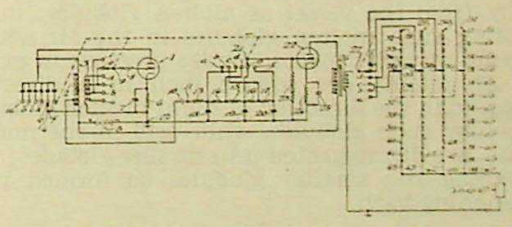
1. In combination with a fluid supply main and a service main, an automatic valve structure having a conduit disposed in the line of flow from one main to the other, including a check valve in said conduit and a bleeder valve in connection therewith on the service side of the check valve, separate seats for said valves, the check valve being maintained open during normal pressure conditions with the superior force on the supply main side of the line and being closed when the pressure on the service main side of the line becomes equal to the pressure on the supply main side of the line, and fluid responsive means in connection with the conduit on both sides of the check valve and acting after said check valve is closed to open the bleeder valve.

2,310,587
SELF-CLEANING STRAINER
George L. MacNeill, Reading, Pa.
Application July 24, 1942, Serial No. 453,210
7 Claims. (Cl. 210—152)



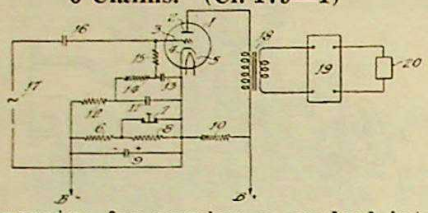
1. In combination, a casing, a strainer operating as a partition dividing the casing into inlet and outlet chambers, means for mounting the strainer in floating sealed relation to the casing including a flexible element connected between the casing and the strainer, means providing for the flow of fluid through the strainer, movable flushing box means for cooperation with the strainer, and means providing for the flow of cleanser fluid through the strainer and the flushing box means in direction counter to the flow of fluid being strained.

2,310,588
AUDIOMETER
Morris Mages, Chicago, Ill., assignor to V. Mueller & Company, Chicago, Ill., a corporation of Illinois
Application January 26, 1942, Serial No. 428,325
7 Claims. (Cl. 179—1)



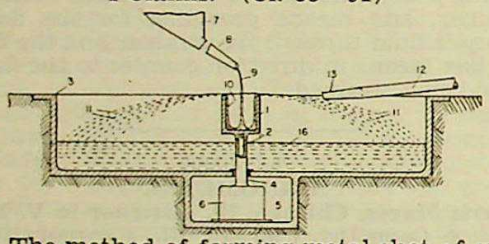
1. An audiometer operable to produce tones of different frequencies at various sound levels with respect to the hearing threshold level of the normal human ear and to indicate the sound level for the various frequencies upon a single indicator scale, said audiometer comprising, in combination, a source of signal voltage adjusted to give a desired frequency versus output characteristic, an attenuator comprising a plurality of main attenuator sections composed of resistances and contact means and mechanically ganged together whereby to give a single calibrated control, each of said main attenuator sections having an effective attenuation range differing from that of other sections but having common points of energy level simultaneously connectable to corresponding ones of said contact means, means for selectively connecting the source of signal voltage to the contact means of said main attenuation sections operable to selectively limit the range of attenuation of any frequency, and tone producing means non-selectively coupled to the output of the attenuator sections.

2,310,589
SIGNAL INTERRUPTING MEANS FOR AUDIOMETERS
Morris Mages, Chicago, Ill., assignor to V. Mueller & Company, Chicago, Ill., a corporation of Illinois
Application January 26, 1942, Serial No. 428,326
6 Claims. (Cl. 179—1)



1. Apparatus for causing a gradual interruption or restoration of a signal voltage being transmitted through a radio tube, consisting of means operating to cause a change in applied bias voltage to said radio tube, and a time delay network of resistors and condensers interposed between said means and the tube to effect the desired gradation of control.

2,310,590
METHOD OF FORMING METAL SHOT
Harvey Marette, University Heights, Ohio
Application July 23, 1941, Serial No. 403,716
4 Claims. (Cl. 83—91)



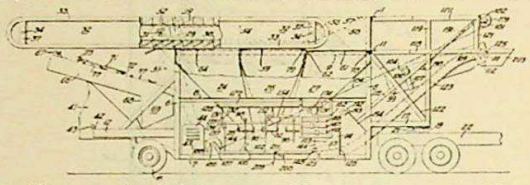
1. The method of forming metal shot of small size comprising supplying molten iron and the like in a stream into a rapidly revolved vessel, whereby such molten metal is thrown centrifugally from the vessel as molten globules; intercepting such molten globules in the air with a stream of water ejected under pressure in excess of 20 pounds per square inch in a direction opposed to the direction of flight of such globules, whereby such globules, while still in the molten state, are disintegrated into smaller globules; and catching the smaller globules so formed in a quenching bath.

2,310,591
REFRACTORY
John Charles McMullen, Niagara Falls, N. Y., assignor to The Carborundum Company, Niagara Falls, N. Y., a corporation of Delaware
No Drawing. Application November 30, 1937, Serial No. 177,229
5 Claims. (Cl. 106—61)

1. A fused cast refractory article composed of 15 to 40% magnesia, 50 to 80% lime and 5 to 20% iron oxide.

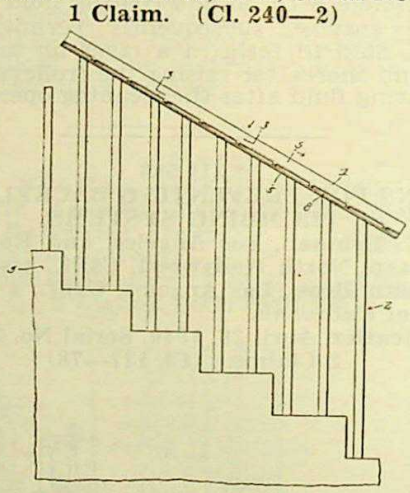
2,310,592
BATCH CHARGER
Bert Noble, Oakland, Calif.
Application March 29, 1941, Serial No. 385,845
13 Claims. (Cl. 214—2)

1. A batch charger comprising a carriage, hoppers on said carriage in which individual quantities of material may be stored, said hoppers each having therein a discharge port and provided with portions foldable to form a recess within the collective hoppers, a material elevator mounted on said carriage and having a considerable portion thereof extending above said hoppers, said elevator being movable on the carriage to bring the portion thereof extending above said hoppers into said recess, means for selectively



directing material from said elevator into the respective hoppers, a scale, including a movable skip, for weighing and receiving material discharged from said hoppers through the discharge ports thereof, means for conveying said skip to an elevated position relative to said carriage, and means for dumping said material from the skip.

2,310,593
HANDRAIL
Stanley E. Orlicki, Los Angeles, Calif., assignor of one-half to Leonard E. Rozycki, Los Angeles, Calif.
Application November 25, 1941, Serial No. 420,419
1 Claim. (Cl. 240—2)

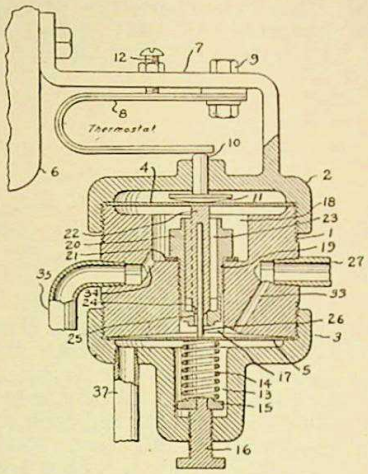


As a new article of manufacture, a banister comprising a rail including a tubular bar, a series of electric lamps mounted in the bar, said bar having a longitudinal series of windows in its lower portion for illuminating a flight of steps on which the banister is mounted, the bar further having a longitudinal series of openings in its upper portion, clear glass covering the first named openings, and frosted glass covering the second named openings, said second named openings providing means for illuminating the rail from the lamps for facilitating locating said rail.

2,310,594
PRIMER FOR INTERNAL COMBUSTION MOTORS
Jesse L. Osburn and William H. Fain, Houston, Tex.
Application November 22, 1940, Serial No. 366,600
4 Claims. (Cl. 123—180)

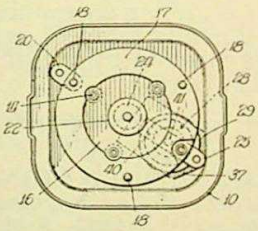
1. A primer for an internal combustion motor, comprising a body having a conduit leading therethrough connected at one end to a source of motive fluid supply, and at its other end into the motor intake, a valve movable to open or

close the conduit and to thereby control the flow of fluid therethrough, yieldable means which include diaphragms arranged on opposite sides of



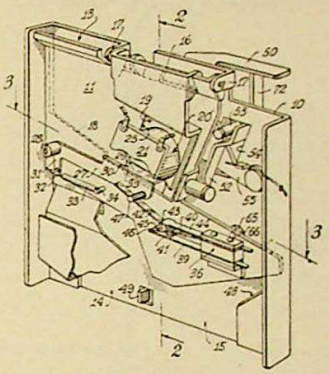
the valve for normally holding the valve in open position, and means when under the influence of the heat of the motor effective to move the valve to closed position to close the conduit.

2,310,595
SELF-CLEANING SWITCH
Charles S. Packer, Chicago, Ill., assignor to Just-rite Manufacturing Company, Chicago, Ill., a corporation of Illinois
Application December 16, 1940, Serial No. 370,293
1 Claim. (Cl. 200—60)



In a switch, the combination with a cap member for a lamp casing, of an insulating disc secured in spaced relation to the interior surface of the cap member, contact elements secured to the inner surface of the disc adjacent the cap member including a central terminal and a peripheral terminal in spaced relation, a movable switch contact of circular shape normally in engagement with the peripheral terminal, said switch contact having a diameter greater than the space between the central and peripheral terminals so that the switch contact may bridge the gap when moved to engage both said terminals, said cap member having a slot therein and the switch contact having a rigid handle portion extending through the slot whereby the switch contact is guided for movement to and from a gap closing position to electrically connect or disconnect the terminals, a plate carried by said handle portion and positioned in contact with the inner surface of the cap member to close the slot, resilient means encircling the handle portion and confined between the plate and the switch contact for yieldingly biasing the switch contact in a direction toward the insulating disc, and means provided by the peripheral terminal for releasably maintaining the movable switch contact in either of its two positions.

2,310,596
COIN CHUTE
William Patzer and Walter A. Tratsch, Chicago, Ill.
Application August 14, 1941, Serial No. 406,848
8 Claims. (Cl. 194—101)

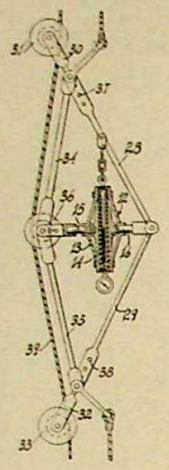


4. In a coin testing apparatus comprising a body providing a coin passage, electromagnetic means carried by said body and having communication with the passage for magnetically affecting the movement of a magnetically attractable token through the passage, the combination of means for rendering said electromagnetic means effective for the purpose aforesaid and including an electric circuit, switch means in said circuit, a member operatively connected to said switch means and having a portion disposed in the passage and over which said token passes and adapted to be actuated by the weight of said token thereon to operate said switch means, a normally open safety switch arranged in said circuit for breaking the said circuit should said token be stayed on said member, thermal sensitive latch means for said safety switch normally biasing the latter into closed circuit condition and including a resistance coil arranged in said circuit and adapted, when the temperature of said circuit reaches a predetermined degree of heat, to release said safety switch for movement into normal open condition, and means pivotally mounted on said body for normally blocking passage of tokens or coins through said passage, said means including a magnetically attracted member disposed adjacent said electromagnetic device and adapted to be magnetically attracted by said last-named device when the circuit thereof is energized for pivotal movement from said blocking position in said passage.

2,310,597
CARRIAGE TYPE WEIGHT INDICATOR
Harold A. Raphael, Bellflower, Calif.
Application April 13, 1940, Serial No. 329,488
7 Claims. (Cl. 265—1.6)

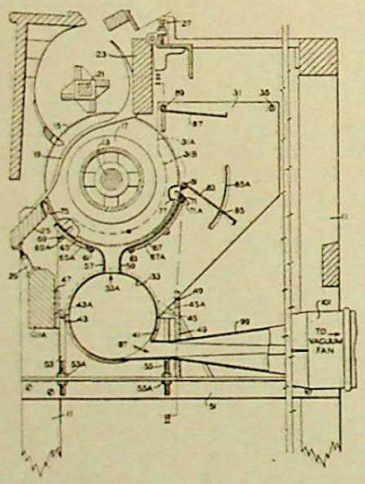
1. A carriage type weight indicator, comprising a pair of outer arms, said outer arms being pivotally secured together at their inner ends, a sheave journaled on the outer end of each of said arms, a pair of inner arms, the outer ends of said inner arms being pivotally secured to the outer arms, means pivotally connecting the inner ends of the inner arms together, a third sheave journaled at the inner ends of the inner arms, a weight indicator, weight indicator actuating members projecting from said weight indicator, means pivotally connecting one of said members to the outer arms, and means pivotally connecting the other of said members to the inner arms, means suspending the weight indicator between

the inner and outer arms, said suspension means being longitudinally adjustable, whereby the



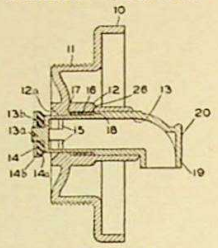
weight indicator and actuating members may be aligned with the inner and outer arms.

2,310,598
DELINTER
John B. Ricker, Memphis, Tenn.
Application February 12, 1942, Serial No. 430,577
10 Claims. (Cl. 19—41)



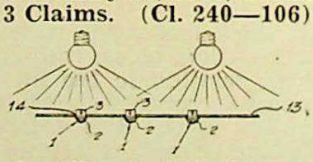
8. In combination with a delinter employing a bank of delinter saws, walls forming a chamber open front and rear, said walls being positioned to establish an opening for centrifugal discharge from said saws substantially co-extensive with the length of said bank and substantially entirely above the level of the axis of said saws, the lower of said walls extending forwardly into adjacency with the peripheral edges of said saws, walls forming a flue leading from adjacency with the periphery of said bank of saws substantially vertically below the arbor of said saws; wall means in adjacency to, and cooperating with, said bank of saws extending from the forward edge of the lower wall of said chamber, arcuately downward and forward to said flue to establish a lint capturing passageway leading along said saw bank into said flue; additional wall means, in adjacency to and cooperating with said bank of saws, extending arcuately downward and rearward therealong to said flue to establish a lint repelling passageway into said flue, and means for setting up exhaust flow of air through said flue and said lint capturing and lint repelling passageways.

2,310,599
FAUCET
Nathan Roach, Cleveland, Ohio, assignor to The Cleveland Brass Manufacturing Company, Cleveland, Ohio, a corporation of Ohio
Application September 16, 1941, Serial No. 411,057
1 Claim. (Cl. 225—44)



In combination, a bung having a threaded cylindrical wall for engagement with the wall of a container bunghole, a sleeve forming part of said bung and located centrally thereof spaced from said cylindrical wall, there being an opening through said bung in registration with the hollow portion of said sleeve, a valve seat on the container-facing side of said bung surrounding said opening, a second sleeve snugly reciprocable within said first sleeve, a faucet discharge spout on the outer end of said second sleeve, a valve on the inner end of said second sleeve adapted to coact with said seat and movable into said container by reciprocation of said second sleeve relative to said first sleeve, spring means between said sleeves urging said valve toward engagement with said seat, a pin extending radially outwardly from said second sleeve, and a spiral cam on said first sleeve adapted to engage said pin and by rotation of said second sleeve to cam said pin and therefore said valve outwardly against said seat to hold said valve closed, said cam at its end nearer the container communicating with a slot extending longitudinally of said first sleeve thus permitting reciprocation of said second sleeve to open said valve.

2,310,600
ILLUMINATED SIGN
Ray J. Robinson, Los Angeles, Calif.
Application February 17, 1941, Serial No. 379,189
3 Claims. (Cl. 240—106)

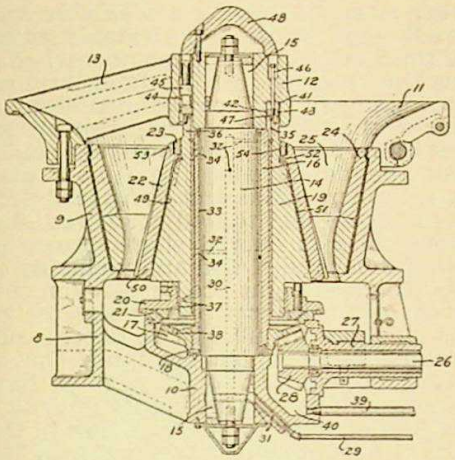


2. A lens for illuminated signs comprising a light transmitting body having a head with oppositely arranged exterior and interior facets, a tubular shank extending rearwardly from said head, and a light transmitting plug of a contrasting color to the body arranged in the bore of said shank and terminating adjacent the interior facets.

2,310,601
GYRATORY CRUSHER
Harvey H. Rumpel, Milwaukee, Wis., assignor to Smith Engineering Works, Milwaukee, Wis., a corporation of Wisconsin
Application April 18, 1940, Serial No. 330,246
4 Claims. (Cl. 83—10)

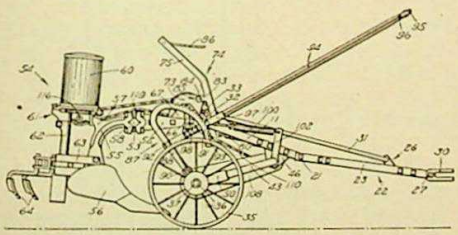
1. In a gyratory crusher, a crushing concave having a hub fixedly mounted centrally of and beyond one end of the concave, a stationary strut disposed centrally within said concave and being rigidly attached to said hub, a crushing

head gyratable about said strut within said concave and co-operating with the latter to form an annular crushing chamber having an inlet surrounding said hub, and a rotary eccentric interposed between said strut and said head for gyrating the latter, said hub having an annular recess facing the head and said head having an



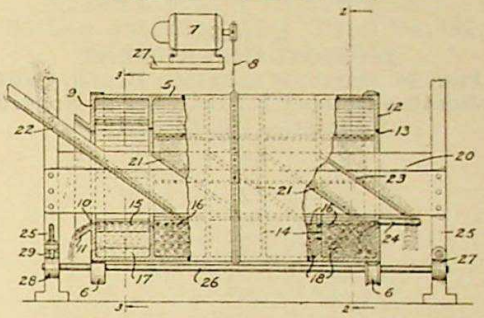
integral annular extension laterally movable within said recess during gyration of the head and slidably coacting with the recess bottom to provide a sliding seal for concealing said eccentric disposed entirely within said recess and devoid of joints exposed directly to said crusher inlet.

2,310,602
LISTER
Walter H. Silver, Moline, Ill., assignor to Deere & Company, Moline, Ill., a corporation of Illinois
Application December 6, 1937, Serial No. 178,252
16 Claims. (Cl. 111—68)



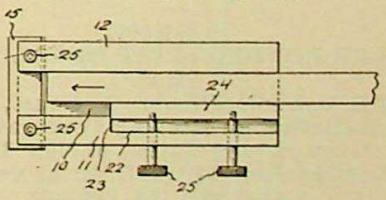
1. A planter comprising, in combination, a frame, a vertically adjustable traction wheel journaled thereon, a rotatable lifting shaft journaled on said frame and having a crank formed thereon, link means for connecting said crank with said wheel, a clutch comprising a normally continuously rotating driven member actuated by said traction wheel and journaled on said frame, an intermittently rotating element operatively connected with said lifting shaft and adapted to be optionally connected with and automatically disconnected from the continuously rotating member, control means for actuating said clutch, planting mechanism mounted on said frame, transmission means for actuating said planting mechanism including a driving element adapted to be operatively connected with said continuously rotating clutch member, and clutch means responsive to movement of said frame relative to said axle serially connected with said transmission means.

2,310,603
SAND COOLER
William H. Taylor, Waukesha County, Wis., assignor to The Vilter Manufacturing Company, Milwaukee, Wis., a corporation of Wisconsin
Application May 21, 1942, Serial No. 443,901
5 Claims. (Cl. 259—3)



1. In combination, a rotary drum having therein partitions dividing the drum interior into a settling chamber at the granular material inlet end of the drum and a subsequent series of cooling chambers, said settling chamber having a series of narrow imperforate elevating vanes therein and said cooling chambers each having a series of wider perforated elevating vanes therein, a granular material supply chute for delivering fresh granular material through said settling chamber directly into the initial cooling chamber of said series, a series of fixed chutes within said rotary drum for advancing granular material cascaded by said vanes from each of said chambers to a succeeding chamber, and means for producing a flow of cooling liquid through said drum.

2,310,604
WOOD CUTTING MACHINE
Edward J. Zindrick, Chicago, Ill.
Application March 12, 1941, Serial No. 383,036
3 Claims. (Cl. 144—175)



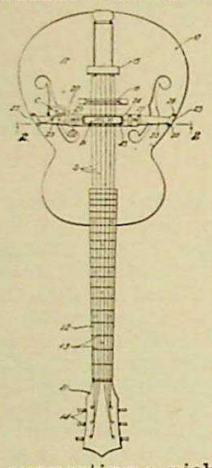
1. A machine of the character described, including a base, spaced parallel stationary side walls defining a channel through which the work passes, a plurality of spaced superimposed knives extending across one end of said channel for cutting the work into strips of predetermined size, an adjustable pressure plate supported by said base and movable in said channel said pressure plate being disposed parallel to the side walls for clamping the work between itself and one of said side walls, and means for operating said plate to exert a pressure against the work to prevent buckling thereof during the cutting operation.

2,310,605
PRODUCTION OF SULPHUR DIOXIDE-OLEFIN RESINS
Maxwell M. Barnett, Port Sulphur, La., assignor to Freeport Sulphur Company, New York, N. Y., a corporation of Delaware
No Drawing. Application February 3, 1939, Serial No. 254,381
9 Claims. (Cl. 260—80)

3. The process for producing resins of the

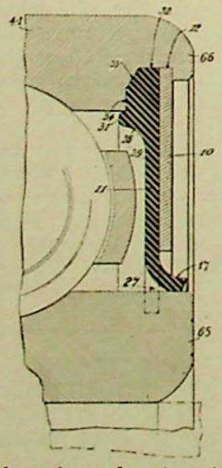
sulphur dioxide-olefin type which comprises reacting sulphur dioxide and a compound selected from the group consisting of olefins, pentyne-1, hexyne-1, allyl alcohol, vinyl acetate and allyl propionate in the presence of a substantially anhydrous ozonide of an olefin.

2,310,606
MUSICAL INSTRUMENT
Paul M. Barth, Manhattan Beach, Calif.
Application October 25, 1941, Serial No. 416,532
9 Claims. (Cl. 84—1.16)



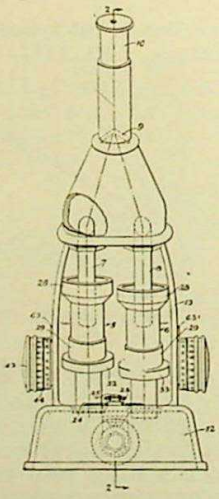
1. Means for supporting a pickup on a musical instrument having a resonant body and strings extending across the top of the body, said means comprising a bridge extending across the top of the body in spaced relation thereto and bearing on the body at the opposite margins of the body only so that it does not interfere with the resonance of the top of the body, and means for supporting the pickup on the bridge in spaced relation to the body and in operative relation to the strings.

2,310,607
RUBBER BONDED SPLIT METAL WASHER SEAL
Dwight E. Batesole, Glenbrook, Conn., assignor to Norma-Hoffmann Bearing Corporation, Stamford, Conn., a corporation of New York
Application June 11, 1941, Serial No. 397,559
2 Claims. (Cl. 286—5)



1. A seal for bearings having inner and outer concentric members, one of which has an annular groove with an inclined wall and the other has a land extending axially beyond said groove, one of said members being rotatably movable in respect to the other, comprising a rubber disc extending from one member to the other in a plane substantially perpendicular to the axis of said members, said rubber disc having an enlargement at one radial end and at one side thereof to engage the groove and press against the inclined wall to seal the groove against the passage of fluid between the grooved member and the enlargement, said rubber disc being flat on the other side and having a yieldable lip at its other radial end adapted to yieldably engage the land of the other concentric member when curved towards the outer end of the land, and a metal disc having one of its faces bonded along its entire face to the flat face of said rubber disc and its outer radial end adapted to engage said groove adjacent the flat side of the rubber disc, and having its inner radial end so spaced from the land member to hold the adjacent radial end of the rubber disc in curved shape under tension below said inner radial end and yieldably against said land to give a light pressure action sufficient to prevent a lubricant from passing between it and the land, but insufficient to exert a substantial braking effect upon the land, the bonded rubber disc beyond the enlargement having a wafer-like thinness and having its unbonded face free and unrestricted to permit a flow of the rubber from the enlargement when drawn upon by the metal disc pressing on the curved end.

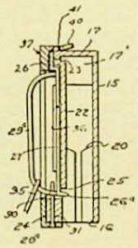
2,310,608
COLORIMETER
Alva H. Bennett, Kenmore, and Roger S. Estey, Buffalo, N. Y., assignors to Spencer Lens Company, Buffalo, N. Y., a corporation of New York
Original application February 23, 1939, Serial No. 257,798. Divided and this application February 29, 1940, Serial No. 321,436
3 Claims. (Cl. 88—14)



1. In a device of the character described, a pair of cup members, a pair of plunger members, each of said cup members being in aligned relation with one of said plunger members, said plunger members each being adapted to enter its respective cup member to vary the depth of the contents thereof, one of said cups being adapted to contain a standard and the other of said cups being adapted to contain a test specimen, adjusting means for adjusting the relative position of each of said cup members and its respective plunger member, each of said adjusting means having indicating means, one of said in-

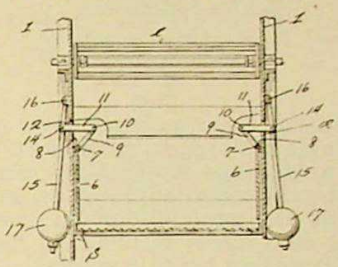
dicating means comprising a unit mark and an index, the other of said indicating means comprising an index and a scale member, said scale member comprising two parts, one of said parts being graduated in integer values and the other of said parts being graduated in fractions of said integer values, the indicating member having the parts graduated in integer values and fractions of said integer values indicating the concentration of the specimen in the cup member associated with the unit mark and index, when the cups and plungers are in such relation with each other that the color intensity of the light transmitted through the standard and test specimen appears equal and the index and unit mark indicating means are in alignment and the adjusting means of the cup and plunger associated with the scale and index are positioned so that the color intensity of the light transmitted through the standard and test specimen appears equal.

2,310,609
SLIDE FASTENER
Arthur K. Berkner, Passaic, N. J., assignor of one-fourth to William J. Brown, Montclair, one-fourth to Peter P. Nielsen, Belleville, and one-fourth to Harry Griffinger, Newark, N. J.
Application March 17, 1942, Serial No. 435,096
1 Claim. (Cl. 24—205.5)



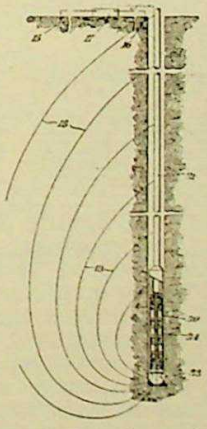
A slide fastener comprising a pair of separable stringers, locking elements projecting from the facing edges of the stringers alternately from said edges and comprising bodies attached to the edges of the stringers and heads on the inner ends of the bodies defined by notches on opposite sides of the bodies affording recesses for reception of portions of the heads of adjacent locking elements, a slider comprising a box having abbreviated longitudinal side walls to engage the outer ends of the bodies of the locking elements to combine said locking elements in engaged position, said side walls being longitudinally slotted to pass said stringers, said box having a segmental separator at its upper end in spaced relation to said side walls to define openings through which the locking elements pass into and out of the box, a locking spring mounted on the top wall of said box and having a locking pin normally projecting through an opening formed in said top wall to a position between two adjacent locking elements whereby movement of the slider along the stringers is positively prevented, operating means for withdrawing said locking pin to permit the slider to be moved in either direction comprising a finger piece flexibly connected to a portion of said locking spring and arranged to withdraw said locking pin from locking position and move the slider along the stringer when the finger piece is pulled in an outward and longitudinal direction, said portion of the locking spring comprising an outwardly and longitudinally bowed member with a loop slidable therealong to flexibly connect the finger piece therewith, a cover comprising a pan-shaped casing fitting on the top or outer side of said box and being apertured to expose said bowed member of the spring, and securing means removably mounting the cover on the box.

2,310,610
DEFLECTOR FOR GRAIN
Ernest F. Bissell, Hayden, Colo.
Application August 16, 1941, Serial No. 407,204
4 Claims. (Cl. 209—254)



1. A grain deflector for a cleaning screen of a combine comprising a vertically arranged plate for position above a cleaning screen and at the side thereof at the receiving end portion of the screen, means for pivotally mounting the upper extremity of the plate in a position to swing over the screen in a direction transversely of the screen, and freely pendulating means operatively engaged with the plate to rock the plate inwardly over the screen as the combine tilts.

2,310,611
ELECTRICAL EXPLORATION OF GEOLOGICAL STRATA
Ernest E. Blondeau, Tulsa, Okla., assignor to Geophysical Research Corporation, New York, N. Y., a corporation of New Jersey
Application December 23, 1938, Serial No. 247,402
9 Claims. (Cl. 255—1.8)



1. Apparatus of the character described comprising a tubular insulated container having a central passageway, means for connecting a drill bit to one end of said container, means for connecting th other end of said container to a drill stem, and a source of electric current in said container having one pole connected to said bit and its other pole connected to said stem.

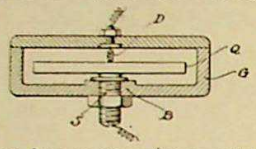
9. In exploration of geological formations traversed by a bore hole of the type bored by a drill stem terminating in a bit, the method of electrical exploration which comprises establishing a difference of electrical potential between said bit and said drill stem, and observing the potential produced at the earth's surface between two spaced grounded electrodes, at least one of which is remote from said drill stem, and observing said potential difference.

2,310,612

MOUNT FOR LONG WAVE QUARTZ CRYSTALS

Heinrich Bremer and Friedrich Krones, Berlin, Germany; vested in the Alien Property Custodian

Application December 6, 1940, Serial No. 368,804
In Germany October 13, 1939
7 Claims. (Cl. 171—327)



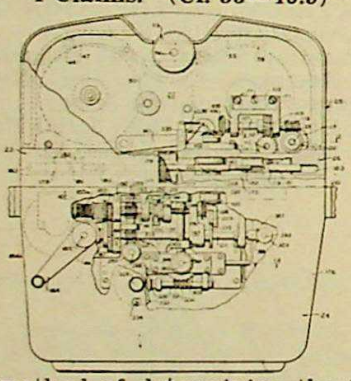
1. A mounting for a quartz crystal plate comprising a single metal surface on each surface of said plate, a threaded stud rigidly secured to at least one of said metal surfaces on said crystal plate and at the central portion thereof, said stud serving as a single mechanical support and electrical connection for said crystal.

2,310,613

METHOD FOR SIMULATING BOMBING

Ambrosius Briechle, Brooklyn, and Roy T. Hurley, Dobbs Ferry, N. Y., and George E. Merritt, Lusby, Md., assignors to Bendix Aviation Corporation, South Bend, Ind., a corporation of Delaware

Original application March 22, 1938, Serial No. 197,402, now Patent No. 2,283,788, dated May 19, 1942. Divided and this application October 21,1939, Serial No. 300,572
4 Claims. (Cl. 33—46.5)



1. The method of determining the theoretical point of impact of an imaginary bomb of assumed characteristics dropped from an airplane which consists in taking a photograph of the target and the plumb point on the earth's surface at the instant the imaginary bomb is supposed to be released, taking a second photograph of the plumb point and the target at a predetermined interval of time after the first photograph is taken, recording the inclination of the camera to the earth's surface, the air speed of the plane, and the time for each exposure, rectifying the photographs, and using said rectified photographs and the recorded data, including the assumed ballistic data of the imaginary bomb, to plot on at least one of said photographs the theoretical point of impact of said bomb.

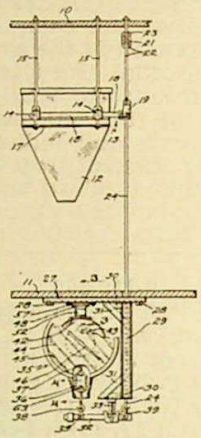
2,310,614

WEIGHING APPARATUS WITH OVERHEAD DIAL UNIT

Oswald S. Carliss, Fairfield, Conn., assignor to The Kron Company, Bridgeport, Conn., a corporation of Connecticut

Application March 2, 1939, Serial No. 259,375
23 Claims. (Cl. 265—27)

1. In a system of load weighing apparatus, the combination with an overhead means of support, of automatic load counterbalancing and weight indicating mechanism, a frame carrying said mechanism, means constructed and arranged to suspend said frame from said overhead means of support and maintain it at a constant distance therebelow in a manner permitting said framework and mechanism to be turnable bodily and in unison about a vertical axis fixed in relation to said support, devices independent of said frame for holding a weigh-



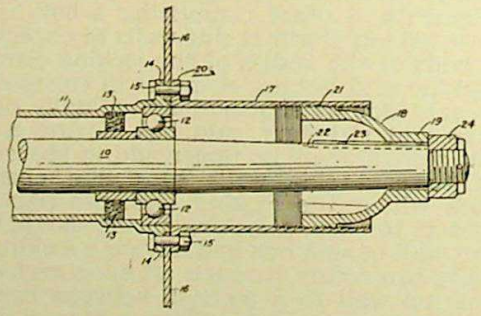
able load constructed to move in response to the weight thereof and located remote from said frame, draft rigging extending from said devices into proximity to said frame, and connections between said draft rigging and said mechanism constructed and arranged to transmit freely from the former to the latter a load pull along said vertical axis with equal effect upon said mechanism in various positions of said frame to which the latter is bodily turnable about said vertical axis.

2,310,615

AXLE PULLER

Henry C. Christian, Berkeley, Calif., assignor of one-half to Elmer W. Stryker, Albany, Calif.

Application April 21, 1941, Serial No. 389,556
2 Claims. (Cl. 29—86.1)



1. A device for pulling the rear axle of an automobile comprising a cylindrical member adapted to surround the outer end of the axle and adapted to be secured against rotation to the axle housing, a retracting member having a threaded connection with the interior of said cylindrical member and having an opening to receive the outer end of the axle, said opening having a key-way to register with the axle key-way whereby a key may be inserted to prevent relative rotation between the retractor and the axle, and said retractor having a shoulder for abutment with a nut threaded on the end of the axle.

2,310,616
SEPARATION OF METACRESOL AND PARACRESOL

Francis E. Cislak and Merritt M. Otto, Indianapolis, Ind., assignors to Reilly Tar & Chemical Corporation, Indianapolis, Ind., a corporation of Indiana

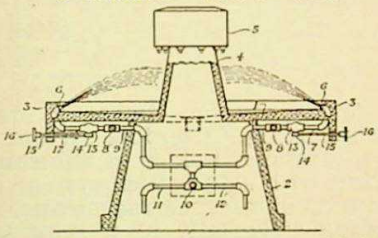
No Drawing. Application August 11, 1941, Serial No. 406,410
6 Claims. (Cl. 260—621)

1. The process of separating an individual cresol of the class consisting of metacresol and paracresol from a phenolic mixture consisting mainly of those two cresols, which consists in reacting such mixture with hexamethylenetetramine to produce a mixture of metacresol-hexamethylenetetramine and paracresol-hexamethylenetetramine, separating the latter mixture by a solvent in which those two addition compounds are differentially soluble to obtain a product rich in the hexamethylenetetramine addition compound with one of the said two cresols, and decomposing said product to recover a purified cresol.

2,310,617
WASH FOUNTAIN

Michael Conner, Saginaw, Mich., assignor to Sugar Beet Products Company, Saginaw, Mich., a corporation of Michigan

Application December 22, 1941, Serial No. 423,941
3 Claims. (Cl. 4—166)



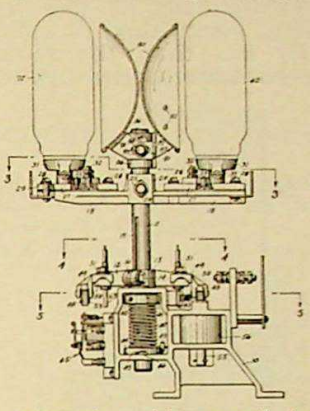
1. A lavatory fountain for multiple use comprising a basin having an outer rim of substantially circular contour, an upstanding column located in the central portion of the bottom of the basin and projecting above the level of said rim; a support for said basin and column; a plurality of spray nozzles located at stations spaced around the inner periphery of the rim so as to direct streams of water toward the column slightly upwardly and higher than the rim; said column being adapted to prevent water from spurting beyond the opposite rim of the basin; a source of water under pressure, a distributing header communicating with said source and partly surrounding the support beneath the bottom of the basin and a plurality of conduits each connecting the header with a nozzle; valve means at each station adapted to be operated by a user independently of valves at other nozzle stations, said means comprising a push rod projecting radially outward adjacent each nozzle; and a pressure pad on said rod adapted to be pushed inwardly by the leg of the user when leaning forward, as in using the fountain.

2,310,618
LIGHTING UNIT

Royal E. Crossley, Fayetteville, N. Y., assignor to Crouse-Hinds Company, Syracuse, N. Y., a corporation of New York

Application January 18, 1940, Serial No. 314,465
4 Claims. (Cl. 240—44)

2. A lighting unit comprising a vertically arranged support, a receptacle bracket mounted on said support and being adjustable axially thereof, a second receptacle bracket mounted on said first bracket, the abutting surfaces of said receptacle brackets being provided with a rib and groove formation extending axially of said first

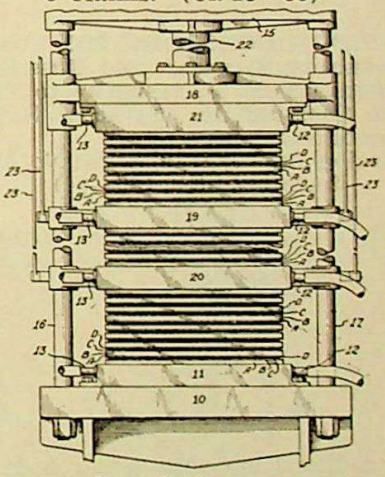


mentioned support, said second bracket being adjustable along said rib and groove formation, and means operable to clamp said second bracket to said first receptacle bracket in adjusted position.

2,310,619
MANUFACTURE OF HARD RUBBER PANELS

Edward R. Dillehay, Glen Ellyn, Ill., assignor to The Richardson Company, Lockland, Ohio, a corporation of Ohio

Application December 15, 1939, Serial No. 309,422
5 Claims. (Cl. 18—53)



5. A process of producing a compressed, cured rubber sheet which comprises pressing a rubber stock against a smooth surfaced metallic member with a sheet of regenerated cellulosic material interposed between the rubber and said metallic member, and curing the rubber while so pressed under heat.

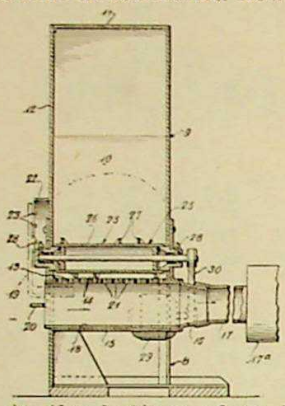
2,310,620
DUSTING MACHINE

Edward R. Dye, Bozeman, Mont., assignor to Executive Board of Montana State College, Bozeman, Mont.

Application September 26, 1941, Serial No. 412,513
2 Claims. (Cl. 43—148)

1. An adjustable discharge dusting machine comprising a dust hopper having an arcuate trough at the bottom thereof, a tunnel below said trough, a plurality of openings in the wall of said tunnel communicating with the interior of said trough, a normally stationary member within said tunnel and fitting closely to the inner wall thereof, means for selectively adjusting said

member to close one or more of said openings in said tunnel wall to thus selectively vary the number of openings communicating between said tunnel and said trough interior, a rotor assembly extending longitudinally of said trough, said rotor assembly comprising a cylinder of a radius slightly less than the radius of said trough to prevent uncontrolled flow of dust from



said hopper to the bottom of said trough and narrow fins extending helically about the circumference of said cylinder, means for rotating said rotor assembly to convey dust from said hopper to the bottom of said trough and to sweep said dust across said openings, and means for causing a flow of air at reduced pressure longitudinally through said tunnel.

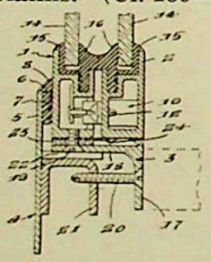
2,310,621

WINDOW CONSTRUCTION UNIT

Harold Edwards, Syracuse, and Russell B. Nelson, Onondaga, N. Y., assignors to The O. M. Edwards Company, Inc., Syracuse, N. Y., a corporation of New York

Application June 4, 1940, Serial No. 338,774

2 Claims. (Cl. 189—64)



1. The combination with a car body formed with a window opening; of a window construction unit comprising opposing sash, an adapter frame mountable in the window opening from one side of the body, the car body on the opposite side having a flange opposed to one of the sash, and means for securing that sash at its edge to the adapter frame, the other sash being secured to the sash which is secured to the adapter frame.

2,310,622

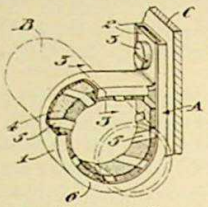
CONDUIT FASTENER

Herman Ray Ellinwood, Hollywood, Calif., assignor to Adel Precision Products Corp., a corporation of California

Original application September 25, 1940, Serial No. 358,366. Divided and this application September 29, 1941, Serial No. 412,789

9 Claims. (Cl. 174—40)

1. In a clip for supporting a metallic conduit line on and electrically grounding it to a metallic support, a metallic line embracing strap, a resilient line embracing cushion of insulation material, means embodied in the strap for retaining said cushion in position lining said strap



and a metallic grounding strip wound around said cushion between the ends of the cushion so as to present a portion for contacting the conduit line and a portion in contact with the strap.

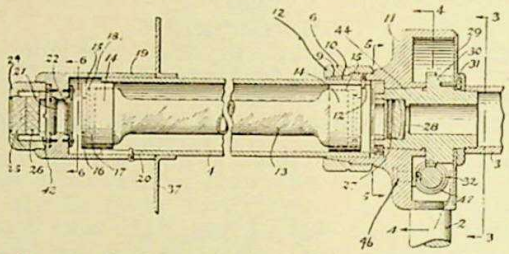
2,310,623

POLARIMETRIC APPARATUS

Roger S. Estey, Buffalo, N. Y., assignor to Spencer Lens Company, Buffalo, N. Y., a corporation of New York

Application March 2, 1940, Serial No. 321,845

5 Claims. (Cl. 88—14)



1. In a device of the character described, means for supporting an optical system and for supporting a specimen holder in substantial optical alignment with said optical system, said optical system including observing means, an analyzer consisting essentially of a relatively thin sheet of light polarizing material supported for rotary movement between the specimen holder and the observing means, and a light polarizer unit in substantial optical alignment with the specimen holder on the side thereof opposite the analyzer, said light polarizer unit consisting of two members of sheet polarizing material, one of said members of said sheet polarizing material covering the entire field and the other member of said sheet polarizing material covering only a central portion of the field, the axis of polarization of the polarizing member covering only a portion of the field being disposed at an acute angle with respect to the axis of polarization of the adjacent polarizing member covering the entire field with said acute angle being such as to obtain substantially the greatest sensitivity and accuracy of test and yet not reduce the transmitted light below an efficient intensity, with said angular dispositions of the axes of polarization of said polarizing member covering only a portion of the field and said adjacent polarizing member covering the entire field being in known fixed relation with each other for aiding in determining the initial setting of the axis of the analyzer.

2,310,624

COLORIMETER

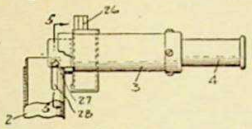
Roger S. Estey and Kennard W. Harper, Buffalo, N. Y., assignors to Spencer Lens Company, Buffalo, N. Y., a corporation of New York

Application April 1, 1940, Serial No. 327,152

3 Claims. (Cl. 88—14)

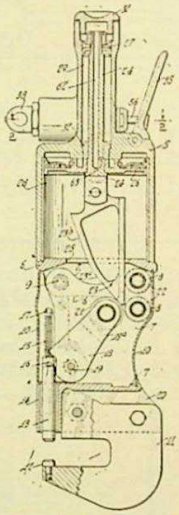
1. A device of the character described comprising a source of illumination, a hollow speci-

men supporting portion and a head portion in optical alignment with said source of illumination, an eyepiece and an optical viewing element in said head portion, and the lower end of said head portion and upper end of said hollow specimen supporting portion being in telescoping relation and a pivotal connection adjacent the



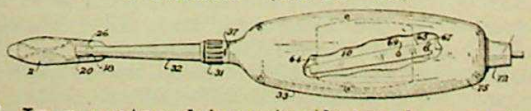
upper end of said hollow specimen supporting portion and the lower end of said head portion, to allow the said head portion to be raised and then pivoted out of alignment with said hollow specimen supporting portion for the removal or insertion of specimens in said hollow specimen supporting portion.

2,310,625
COMPRESSION RIVETER
Howard R. Fischer, Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a corporation of New Jersey
Application January 30, 1940, Serial No. 316,299
8 Claims. (Cl. 121—38)



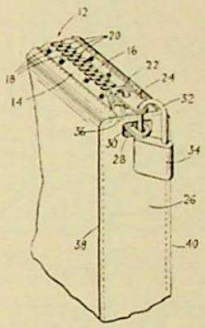
1. In a riveting or like machine, the combination of a pair of piston chambers, a pressure fluid operated piston movable within one of said chambers, a second pressure fluid operated piston connected to the first said piston and movable within the other of said chambers, means for controlling the flow of pressure fluid to said chambers including a valve for controlling the flow of pressure fluid to one of said chambers and a valve for controlling the flow of pressure fluid to the other of said chambers, and means for operating said valves, said means acting during a portion of its movement to operate one of said valves and acting during another portion of its movement to operate both of said valves.

2,310,626
MOTOR DRIVEN TOOTHBRUSH
Jacob Gold, Newton, N. J.
Application April 3, 1940, Serial No. 327,605
2 Claims. (Cl. 15—23)



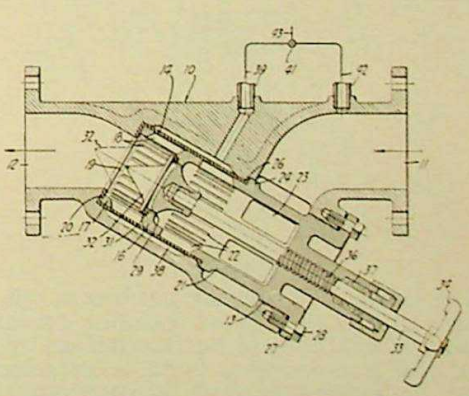
1. In a motor driven tooth brush, a motor, a rotatable brush, a body casing, a shank extending therefrom, a mouth guard forming a continuation of said shank on one side thereof and a gravity actuated brush rotation reversing means housed in said body casing operable by rotation of said body casing about its longitudinal axis.

2,310,627
PADLOCKED SLIDER FOR SLIDE FASTENERS
Martin Greene, New York, N. Y., assignor to Conmar Products Corporation, Bayonne, N. J., a corporation of New Jersey
Application September 24, 1940, Serial No. 358,066
7 Claims. (Cl. 70—68)



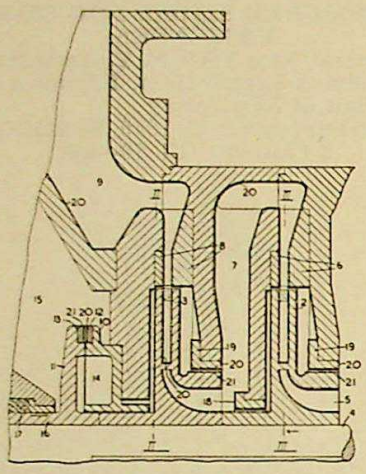
1. A padlockable slider for a slide fastener, said slider comprising top and bottom walls connected by a neck portion, a pull on the top wall, and a slider extension projecting from the neck end of the slider at the bottom wall, said pull and said extension having openings adapted to receive the shackle of a padlock.

2,310,628
FLOW CONTROL VALVE
Marvin H. Grove, Piedmont, Calif.
Application April 15, 1942, Serial No. 438,993
4 Claims. (Cl. 277—46)



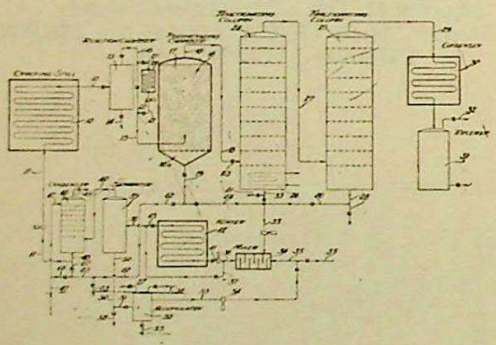
1. In a flow control valve, a body having inflow and outflow passages, a resilient tube within the body and having its ends sealed with respect to the body about said passages, the body providing a chamber about the tube for receiving a controlling fluid under pressure, a circularly contoured barrier disposed within the tube, the tube being adapted to engage and seal upon the periphery of the barrier, a port formed through the barrier and when unobstructed serving to permit flow of fluid through the same, and supplemental valve means serving to control flow of fluid through said port.

2,310,629
PROTECTION OF PUMP SURFACES
Daniel van der Merwe Haarhoff, Alberton, Transvaal, Union of South Africa, assignor to Anti-Abradants (Proprietary) Limited, Johannesburg, Transvaal, Union of South Africa
Application May 16, 1939, Serial No. 274,055
7 Claims. (Cl. 103—114)



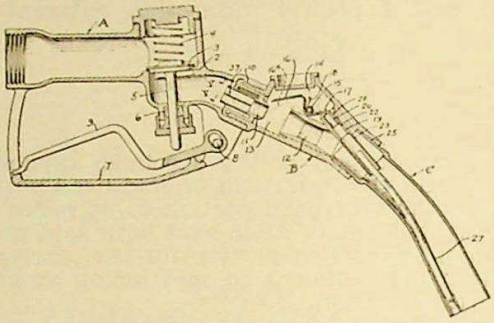
7. In a centrifugal pump, for transporting liquid or pulp, containing sand, gravel and the like abrasive matter, working surfaces comprising hard and tough wear-resistant granular material which is resiliently bedded and bonded.

2,310,630
METHOD OF POLYMERIZING AND CRACKING PETROLEUM HYDROCARBONS
William T. Hancock, Long Beach, Calif.
Application January 13, 1941, Serial No. 374,177
10 Claims. (Cl. 196—96)



1. The process of refining petroleum oils that includes, subjecting heated gasoline-containing cracked hydrocarbons to polymerization by contacting the hydrocarbons with a polymerizing medium in a treating zone, continuously fractionating the polymerized hydrocarbons to produce a vaporous fraction containing hydrocarbons of the gasoline range and a liquid fraction having a boiling range higher than gasoline, then mixing said liquid fraction with solvent petroleum oil having a higher boiling range than said liquid fraction, vaporizing and separating the last mentioned fraction from the solvent oil to leave residual oil containing impurities removed from the hydrocarbons of said liquid fraction, and recirculating and admixing a stream of the residual oil with the liquid fraction being produced by said fractionation of the polymerized hydrocarbons.

2,310,631
AUTOMATIC SHUTOFF VALVE FOR FILLING SPOUTS
William A. Hansen, Dos Palos, Calif.
Application August 20, 1940, Serial No. 353,363
4 Claims. (Cl. 226—127)



1. A device of the character described comprising a housing having an inlet at one end and a discharge spout at the other, for conducting liquid to a receptacle a manually operated valve controlling the flow of liquid, a pair of cooperating aspirating nozzles disposed within the housing, a chamber formed within the housing in which a partial vacuum is formed when a liquid flow is established through the nozzles, an automatically actuated valve within the housing and normally open, said automatically actuated valve when closed stopping liquid flow through the nozzles, means through which the vacuum maintained in the chamber is effective for withdrawing liquid from the receptacle when a desired liquid level has been reached, and means actuated by the withdrawn liquid for closing the automatically actuated valve.

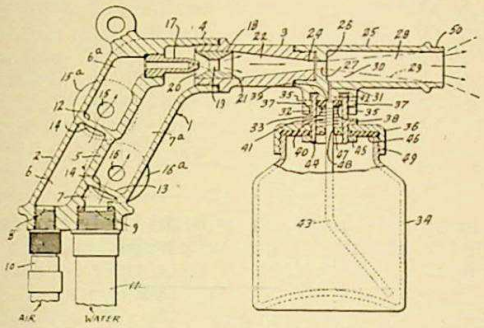
2,310,632
PAPER PENCIL HOLDER
John C. Hatfield, Tulsa, Okla., assignor of one-half to Henry E. Holm, Tulsa, Okla.
Application June 6, 1942, Serial No. 446,123
3 Claims. (Cl. 120—9)

1. A connector for pencils comprising a tube composed of a substantially triangular strip of paper wound longitudinally about itself and secured by a suitable adhesive, said winding being started with the wide end of the strip and terminating with the narrow end, thus providing the tube wall with a graduated thickness increasing from the ends toward the mid-section.

2,310,633
SPRAYING APPARATUS
Douglas D. Heimburger, Beverly Hills, Calif., assignor to Kelite Products, Inc., Los Angeles, Calif., a corporation of California
Application May 7, 1940, Serial No. 333,755
4 Claims. (Cl. 299—86)

2. In a spray-gun apparatus, the combina-

tion of a body having a duct therethrough for compressed air or gas, and having a duct therethrough for conducting a liquid, injector means within the body, including a nozzle and means having a duct into which the nozzle projects, for developing a compound current composed of the compressed air or gas and the liquid, said body having a tapering mixing chamber into which the gas and liquid pass from said duct, and having a gradually reduced cross-section



in which the elements composing the compound current become mixed, said body having an expansion chamber beyond, and distinct from, the mixing chamber, into which the compound current from the mixing chamber issues, and in which the compound current expands as it flows through the body; and means for effecting the entrainment of a liquid into the expansion chamber by the compound current flowing therethrough.

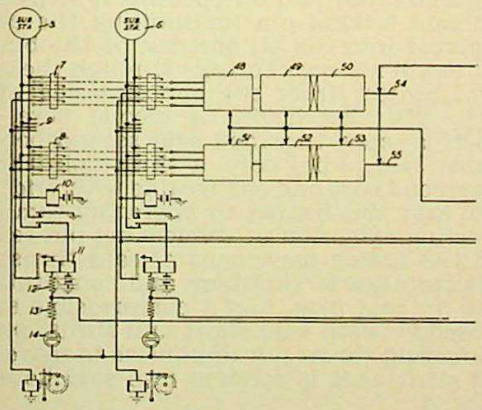
2,310,634

COMMUNICATION SYSTEM

William H. T. Holden, Woodside, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York

Application October 15, 1941, Serial No. 414,991

14 Claims. (Cl. 179—18)



1. In a communication system, a plurality of subscribers' lines, each said line having a relay connected thereto responsive to switchhook and dial operation on said line, a line finder, a first branch circuit controlled by said relay for starting said line finder, said first branch circuit including an electronic circuit closing tube fired by said relay, a second branch circuit in parallel with said first branch circuit appearing in said line finder for marking said line as calling in said line finder, and means responsive to the extension of said second branch circuit by said line finder for quenching said tube for opening said first branch circuit.

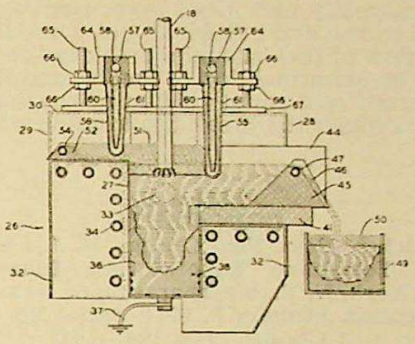
2,310,635

METAL FUSING APPARATUS

Robert K. Hopkins, New York, N. Y., assignor to The M. W. Kellogg Company, New York, N. Y., a corporation of Delaware

Application September 27, 1941, Serial No. 412,571

9 Claims. (Cl. 13—9)



8. In apparatus for producing metal, a metal crucible member having a body portion defining within it a fusion zone wherein metal is produced by heat supplied through the discharge of electric current, the bottom of said body portion including an extension of reduced diameter, a metal electrode member fitting in said extension and projecting into said fusion zone, one end of said electrode member being united to and movable with the end of said extension, and means intermediate the ends of said extension providing for movement of said electrode member and the end of said extension independently of remainder of said extension, the bottom and sides of said body portion being lined with non-metallic refractory material.

2,310,636

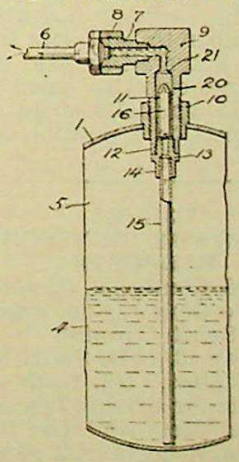
AUTOMATIC CUTOFF VALVE

Styles T. Howard, Jeffersonville, Ind.

Application August 29, 1941, Serial No. 408,698

2 Claims. (Cl. 251—120)

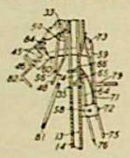
(Granted under the act of March 3, 1883, as amended April 30, 1928; 370 O. G. 757)



1. An automatic fuel cut-off valve having a body portion and a bore therein provided with a valve seat at its upper end, a check of less length than the length of the bore having a cut-away portion at its lower end and a tapered valve portion at its upper end adapted to seat in said valve seat, said tapered valve portion having a slightly flattened portion adapted to permit the passage of a small amount of fuel when the valve is seated, said check having flattened side portions adapted to provide for normal flow of fuel beyond said check when in its lower position, a

nipple mounted at the lower end of the bore of the body portion having a fuel passage therein, radiating fuel grooves in the upper end of the nipple adapted to support the check in its lower position and provide for the normal flow of fuel beneath said check and up through said fuel passages at the sides of the check, said check adapted to normally rest in its lower position and be caused to rise and cut off all but a small portion of the flow of fuel, should a break in the fuel line permit an abnormal flow of fuel beyond the valve, and permit said small portion of the fuel to indicate through the break the location of same.

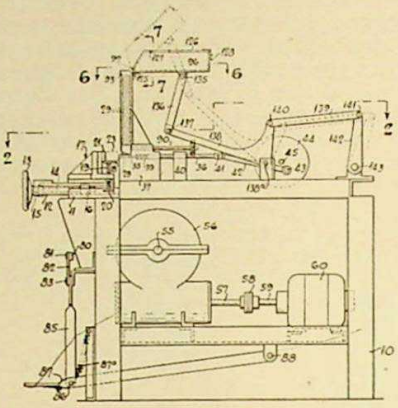
2,310,637
COIN CHUTE
Frederick A. Hoyt, East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application January 8, 1941, Serial No. 373,562
4 Claims. (Cl. 194—101)



1. In a coin collector, a substantially vertically arranged coin runway section down which a deposited coin falls substantially vertically, said section being defined by opposed side walls, one of said walls having an aperture of sufficient size to permit a coin of standard diameter to be discharged therethrough, a permanent magnet, hinged means biased to support said magnet adjacent said aperture for holding a deposited magnetic slug in a position in which said slug projects partially through said aperture, said other side wall having a slot adjacent the lower edge of said aperture, a pivoted member adapted to enter said slot to block said runway but biased to a non-blocking position, manually operated means adapted to be moved from a normal position to an advanced position, means actuated by said manually operated means in the initial advancement of said manually operated means for moving said member to said coin blocking position, and means actuated by said manually operated means and effective upon further advancement of said manually operated means for moving said magnet to a position releasing said slug.

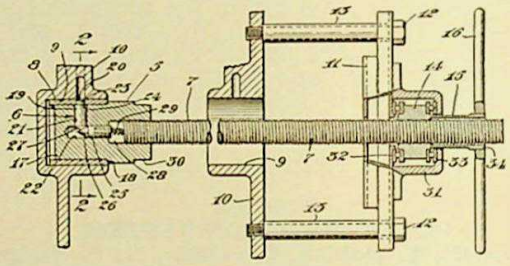
2,310,638
APPARATUS FOR DRIVING PINS IN BEDPOSTS
Elbert B. Hubbard, Sumter, S. C., assignor to Williams Furniture Corporation, Sumter, S. C., a corporation of South Carolina
Application May 13, 1941, Serial No. 393,223
5 Claims. (Cl. 1—6)

1. In a machine for driving headless pins into members such as posts and the like, a rotary wheel mounted on a horizontal axis, said wheel having an open slot in its periphery, a pin receiving chute disposed above said wheel whereby most position, a pivoted receptacle for holding the lowermost pin in the chute will fall sidewise into said slot upon each revolution of the wheel, and fall out of the slot when it reaches lower-unalined headless pins, said receptacle having an opening therein through which pins are adapted to successively pass into said chute, means for oscillating said receptacle to cause the pins to pass through said opening and into said chute, said receptacle having a V-shaped bottom the lowermost portion of which is in alinement with the opening therein whereby the pins will be



placed in parallel position prior to their emerging through the opening into the chute.

2,310,639
BUSHING TOOL
Charles E. Johnson, Jr., Phoenix, Ariz.
Application February 11, 1941, Serial No. 378,431
4 Claims. (Cl. 29—88.2)

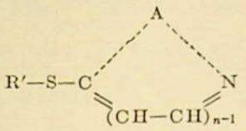


1. A bushing tool comprising, a plug adapted to be inserted into a bushing in which an oil opening is provided said plug having a radial bore, a locking pin slidable in said radial bore for extension into said oil opening, a stop shoulder on said locking pin for limiting the extension thereof into the oil opening of the bushing so that it will not pass entirely through the opening and project from the opposite side of the bushing, said plug having a second bore, part of which is screw threaded said second bore intersecting said radial bore, a thrust pin slidable in said second bore and engageable with said locking pin, said pins having co-operating cam faces for effecting extension of the locking pin responsive to the sliding movement of said thrust pin, a shaft threaded in said bore and constituting a support for said plug, and a compressible spring interposed between said shaft and thrust pin for actuating said thrust pin responsive to movement of said shaft as it is screwed into said bore.

2,310,640
PRODUCTION OF COMPOUNDS OF THE CYANINE TYPE
John David Kendall, Ilford, England, assignor to Ilford Limited, Ilford, England, a British company
No Drawing. Application May 12, 1934, Serial No. 725,412. In Great Britain May 18, 1933
5 Claims. (Cl. 260—240)

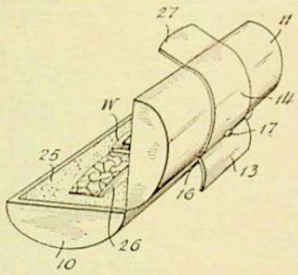
1. A process for the production of cyanine compounds which comprises mixing together a heterocyclic nitrogen base of the type used in cyanine dyes containing a reactive methyl group in a position selected from the α and γ positions

to the ring nitrogen atom, an organic compound of the general formula:



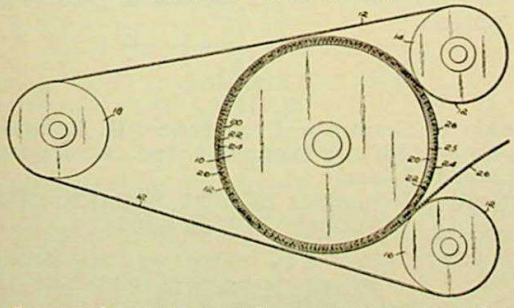
wherein R′ is an alkyl group, A constitutes the atoms necessary to complete a heterocyclic nitrogen nucleus of the type used in cyanine dyes and n is a positive integer less than 3, and a sfficient amount of an alkyl-para-toluene sulphonate required to form the quaternary ammonium salts of said heterocyclic nitrogen base and said organic compound, and heating the whole mixture.

2,310,641
DISPLAY BOX
Eugene Lux, New York, N. Y., assignor to Bulova Watch Company, Incorporated, New York, N. Y., a corporation of New York
Application May 28, 1941, Serial No. 395,512
6 Claims. (Cl. 206—75)



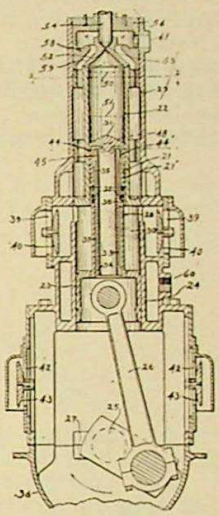
1. A receptacle comprising a base that is rockable when placed on a flat surface, a cover hingedly mounted on said base, a prop hingedly mounted on said receptacle for movement relatively to the cover for rendering said base stable, and means for moving said prop from an inactive position to an active position upon movement of said cover about its hinge.

2,310,642
VULCANIZING APPARATUS
Grosvenor D. Marcy, Newton Highlands, Mass., assignor to Boston Woven Hose & Rubber Company, Cambridge, Mass., a corporation of Massachusetts
Application June 26, 1941, Serial No. 399,861
8 Claims. (Cl. 18—6)



1. In combination with a continuous vulcanizing machine employing a heated drum and a pressure band, a demountable mold comprising a thin, flexible, cylindrical shell, and a layer of vulcanized rubber secured to the shell and having a pattern formed in its surface, the shell being dimensioned to slip over the drum and be held against it throughout a portion of its circumference by the pressure band.

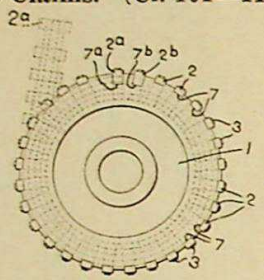
2,310,643
SUPERCHARGED, COMPRESSION-IGNITION, INTERNAL COMBUSTION ENGINE
Francis Marburg, St. Petersburg, Fla.
Application June 7, 1941, Serial No. 397,087
44 Claims. (Cl. 123—71)



1. An internal combustion power unit of the supercharged compression-ignition type having a power cylinder, a cylinder head and a piston, the power unit having an automatically controlled air-inlet port for purposes of scavenging and internally air-cooling and supercharging with substantially pure air, the power unit having a fuel inlet port terminating into the compression chamber, the power unit having a power piston controlled outlet port for combustion products, axially outer portions of said piston serving as a power piston containing piston rings sliding snugly within said power cylinder, axially inner portions of said piston being of greater diameter than said power piston and having a wrist pin and serving as a cylindrical crosshead, a cylindrical guide for said crosshead, said guide being connected with said power cylinder and arranged coaxially with and axially inwardly therefrom, a crankcase having a cooling-gas port communicating therewith, a crankshaft and a crankshaft bearing, a connecting rod driven by said crosshead and driving said crankshaft, the piston stroke being twice as great, more or less, as the power piston diameter, said guide and said crosshead absorbing the side-thrust caused by said connecting rod and acting as a cooling-gas pump, axially middle portions of said piston and the internal cylindrical surfaces of axially inner portions of said power cylinder and of axially outer portions of said guide and the axially outer surface of said crosshead and the axially inner surface of said power cylinder, together, forming a cooling-gas passage, the power unit having a second cooling-gas port, said latter port communicating with said cooling-gas passage, said piston being hollow except at its top, the wall of said piston being perforated adjacent to said power piston, at least one of the said cooling-gas ports being automatically controlled, the arrangement being such that the cooling-gas port communicating with said passage, the said passage, the said perforation, the hollow within said piston, the crankcase and the cooling-gas port communicating therewith, together, are forming a group and are in series and in communication with each other during at least half of a piston stroke, the said cooling-gas-control causing a considerably greater amount of cooling-gas to flow through

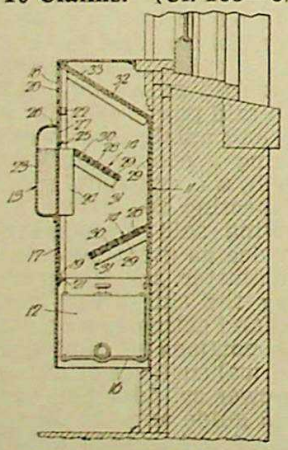
said group in one direction than in the opposite direction during the reciprocating action of said piston.

2,310,644
TYPE WHEEL FOR MARKING MACHINES
Otto B. Meyers, Quakertown, Pa., assignor to Markem Machine Company, Keene, N. H., a corporation of New Hampshire
Original application January 13, 1940, Serial No. 313,699. Divided and this application June 27, 1941, Serial No. 399,982
3 Claims. (Cl. 101—110)



1. A type wheel for marking machines comprising a body portion having an annular peripheral groove and peripheral transverse notches, a series of type members, each having a body portion to be received in said groove, and a head portion to be received in one of said notches, and coiled springs connecting the end type members of the series and on which the intermediate type members are strung, said springs acting to yieldingly hold the type members in position on the periphery of the body portion.

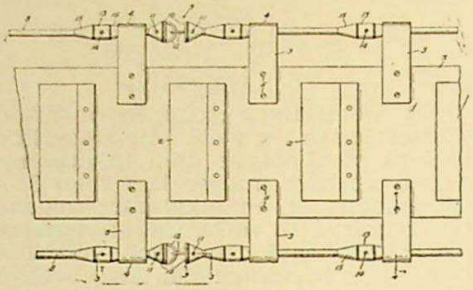
2,310,645
HEATING DEVICE
John L. Mohun, Chicago, Ill.
Application September 16, 1940, Serial No. 357,014
10 Claims. (Cl. 183—32)



3. In an air heating and cleaning device, a convector, a shell telescoped over said convector, an external water container on said shell having an opening communicating with the interior of said shell, vertical fins attached to the inner wall of said container in parallel relation below said opening, and a sloping scrubber having its upper edge adjacent the upper end of said fins whereby a large portion of the heated air rising from the convector is directed against said fins.

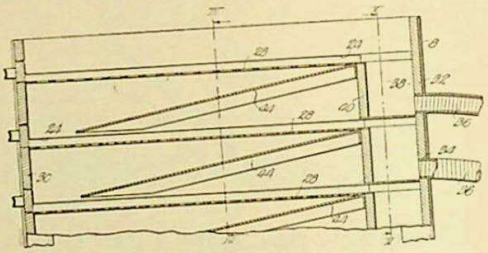
2,310,646
ENDLESS CONVEYER
Joseph P. Morgan, New Castle, Pa.
Application May 6, 1942, Serial No. 441,944
3 Claims. (Cl. 198—184)

1. A conveyer of the character described comprising an endless belt, eyes mounted on the side portions of said belt, endless cables passing through said eyes, collars fixed on said cables



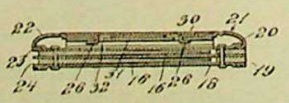
between the eyes, and set screws securing the collars in position on the cables, said collars including substantially conical end portions engageable in the eyes.

2,310,647
GRAIN GRADER
Guy E. Morse, Waterloo, Nebr.
Application December 2, 1940, Serial No. 368,143
7 Claims. (Cl. 209—316)



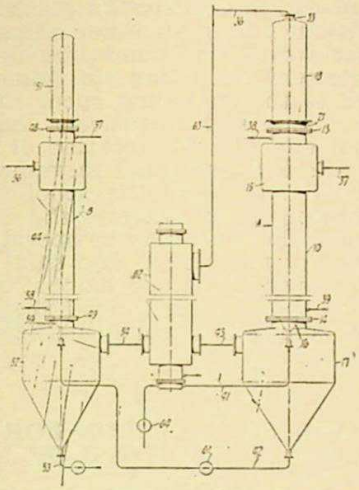
1. In a grain grader of the character described, a housing; yieldable means supporting said housing for free vertical and horizontal movement; a plurality of vertically spaced inclined screens in the housing each respectively terminating at its upper end at the edge of an open top hopper; an inclined apron beneath each screen respectively for conveying material to the lowermost part of the screen next below, said aprons being more steeply inclined than the screens; and means for moving said housing through an endless, vertical path of travel with sufficient force to pitch all of the material being graded and incapable of passing through the respective screens upwardly along the screens and into the hoppers as the material passing through the screens is moved downwardly by the action of gravity along the aprons.

2,310,648
KNIFE
Antonio Paolantonio, Providence, R. I., assignor to Colonial Knife Company, Inc., a corporation of Rhode Island
Application November 23, 1942, Serial No. 466,574
6 Claims. (Cl. 30—164)



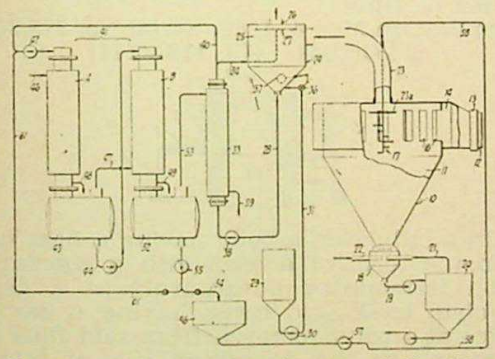
1. In a knife having spaced plates providing the frame thereof, a shell secured to said frame, a cover over said shell with its edge portions extending over the edges of the shell and beneath the same, said cover comprising a sheet of thin, flexible material and a binding member on the under side of the shell and secured thereto.

2,310,649
EVAPORATING APPARATUS
David D. Peebles, Berkeley, Calif., assignor to Golden State Company, Ltd., San Francisco, Calif., a corporation of Delaware
Application August 2, 1940, Serial No. 349,417
4 Claims. (Cl. 159—27)



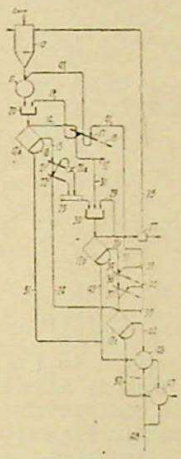
1. In an evaporating method for the concentration of liquid materials wherein liquid material to be evaporated is passed at high velocities through heated evaporating tubes, the improvement comprising causing the liquid material interspersed with evolved vapor to pass upwardly through one set of evaporating tubes, causing the liquid material and a substantial part of the vapor discharged from the first set of tubes to enter the second set of tubes, and diverting the remaining part of the vapor discharged from the first set of tubes.

2,310,650
DRYING APPARATUS AND METHOD
David D. Peebles, Berkeley, Calif., assignor to Golden State Company, Ltd., San Francisco, Calif., a corporation of Delaware
Application August 2, 1940, Serial No. 349,420
6 Claims. (Cl. 159—17)



6. In processes for treatment of liquid materials to produce powdered products, wherein the liquid material is first concentrated by evaporation and then subjected to a spray drying operation, the spray drying operation being characterized by continuous removal of drying gas from the desiccating zone together with some entrained powder, the improvement comprising the step of condensing vapor evolved from the liquid material in the evaporating operation, utilizing for the condensing operation a heat exchange operation in which heat absorbed from the vapor is transferred to liquid material being supplied to the process, washing gases withdrawn from said desiccating zone by contact with liquid material immediately after it has passed through said last named step, said washing operation being accompanied by some evaporation of moisture from the material and cooling of the same, and then reusing the cooled liquid material in the condensing operation to absorb heat.

2,310,651
STARCH MANUFACTURING PROCESS
Albert Peltzer and Albert Peltzer, Jr., San Francisco, Calif., assignors to Merco Centrifugal Company, San Francisco, Calif., a corporation of California
Application April 8, 1938, Serial No. 200,896
27 Claims. (Cl. 127—68)



1. In a wet starch manufacturing process, where corn or like starch bearing material is subjected to steeping and cracking, the improvement comprising subjecting the cracked material to centrifugal separation, and removing germs from at least one of the centrifugally separated components.

2,310,652
SOIL BUILDER
Charles Peter, Salt Lake City, Utah
No Drawing. Application December 9, 1939, Serial No. 308,448
8 Claims. (Cl. 71—24)

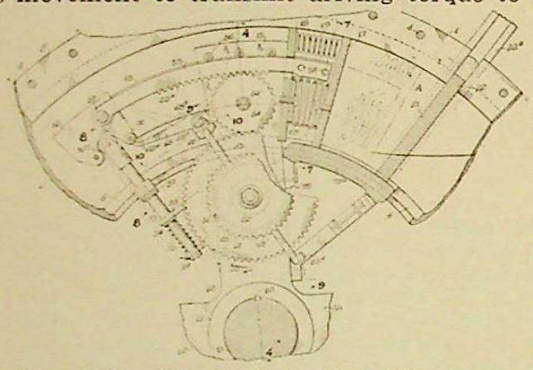
1. The process of revitalizing bacteria present in and normally dormant in a freshly mined bituminous substance, comprising heating the bituminous substance to 310 degrees Fahr. or less, but not to less than approximately 125 degrees Fahr., and continuing the appplication of heat at a temperature not exceeding 310° F. for a length of time only sufficient to activate spore-bearing, Gram-negative, non-motile, anaerobic rod bacteria which were formerly in a dormant state.

5. Preparing a soil builder, comprising dividing bituminous material into fine particles, bedding the finely divided material, heating mill tailings to a temperature of from 800 to 1200 degrees Fahrenheit, blanketing the bedded bituminous material with the heated mill tailings, and incorporating the mill tailings while hot with the bedded bituminous material.

2,310,653
ROTARY ENGINE
Jeanne M. Reynolds, Akron, Ohio
Application March 29, 1941, Serial No. 385,959
20 Claims. (Cl. 123—14)

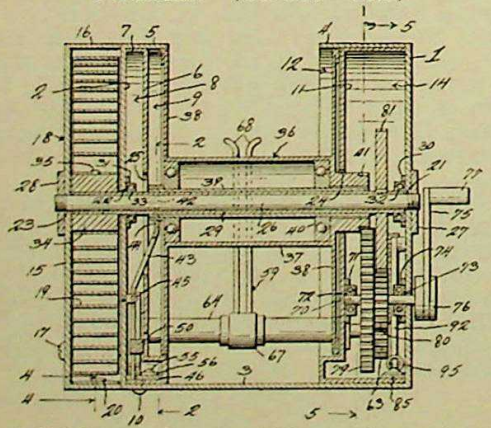
1. In an internal combustion engine, in com-

bination, an annular cylinder, an engine shaft concentric to said cylinder by location at the axis of the latter, radial drive arms moving with the said engine shaft and extending therefrom into the cylinder, the cylinder being formed with spaced portions at its inner side through which the drive arms pass, movable abutments mounted on the cylinder and movable into the same to provide a wall of a combustion chamber, and movable out of the same so as not to obstruct the movement of the arms, piston means mounted on the outer ends of the drive arms, said piston means comprising for each drive arm a head movable upon the drive arm within the cylinder, a piston unit carried by said head and adapted by its movement to transmit driving torque to the



head and therethrough to the drive arm with which the piston unit is associated, said piston unit comprising a contractable and expansible piston structure, means for expanding the piston structure, means for locking the piston structure in contracted condition, means for admitting a fuel mixture into the cylinder, timing means for said means, and means for releasing the piston structure when contracted so that by expansion thereof gases in a combustion chamber of the cylinder will be compressed, together with closure means for the space at the inner side of the cylinder cooperative with an associated abutment and piston means to provide for confining of combustible gases introduced into a portion of the cylinder forming said combustion chamber.

2,310,654
FISHING REEL
Charles E. Sanborn, Stillwater, Okla.
Application July 13, 1940, Serial No. 345,409
9 Claims. (Cl. 242—84.3)

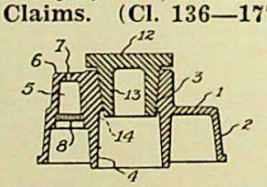


9. A fishing reel, comprising a frame having a base and spaced head and tail plates secured to the base, a shaft connecting said plates and secured at its ends thereto, a tubular shaft encircling and supported by the first shaft, antifriction supporting means upon the inner faces of the head and tail plates with which the ends of said tubular shaft are engaged and by which the tubular shaft is maintained for rotation coaxial with the first shaft, a second tubular shaft encircling the first tubular shaft and having longitudinal movement thereon, a line spool on and coaxial with the second tubular shaft, an antifriction unit within said spool at each end, each of said units including an inner element encircling and secured to the second tubular shaft and an outer element encircling the inner element and secured to the encircling spool, means carried by the frame and operatively coupled with the spool for effecting the rotation of the spool, means for effecting the axial movement of the second tubular shaft and the spool relative to the spool rotating means whereby the spool rotating means and the spool may be operatively coupled together or uncoupled, and said head and tail plates being maintained against separatory movement by the first-mentioned shaft and the first tubular shaft maintaining the head and tail plates in spaced relation.

2,310,655
PROCESS AND COMPOSITION FOR PURIFICATION AND TREATMENT OF NATURAL OR SEWERAGE WATERS
Phillip C. Schneider, Columbus, Ohio, assignor of one-half to Paul B. Joyce, Columbus, Ohio
No Drawing. Application September 23, 1940, Serial No. 357,952
8 Claims. (Cl. 210—23)

1. The method of treating water, which comprises adding to the water, in amounts sufficient to kill substantially all bacteria, the composition which comprises as its essential ingredients from 5 to 30 per cent by weight ferrous ammonia sulfate and from 70 to 95 per cent by weight marls containing at least 25 per cent calcium carbonate, and removing from the water the substances formed by the chemicals added to the water.

2,310,656
CELL COVER WITH ELECTROLYTE CONTROL
McConnell Shank, Oak Park, Ill., assignor to The Richardson Company, Lockland, Ohio, a corporation of Ohio
Application May 4, 1940, Serial No. 333,365
12 Claims. (Cl. 136—177)

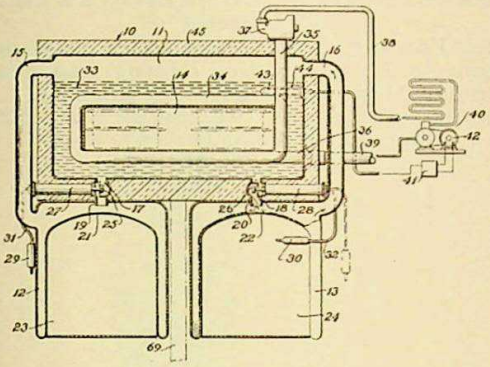


1. In a cell cover, a body having a filler opening in the form of a well with a tubular extension terminating downwardly at a desired electrolyte level, said cover having a gas vent opening at a point removed from said filler well, and means on the downward side of said gas vent opening to restrain the passage of gases therethrough to a rate less than the normal rate of addition of water to said storage battery through said filler well, said restraining means comprising a porous material impervious to the action of storage battery electrolyte.

2,310,657
MULTIPLE TEMPERATURE REFRIGERATING APPARATUS
John J. Shively, New York, N. Y.
Application November 2, 1938, Serial No. 238,310
11 Claims. (Cl. 62—115)

1. In a device of the character described, in

combination, an accumulator casing adapted to contain a substantial body of volatile liquid, means including a primary evaporator in said casing in heat exchange relationship with said liquid and adapted to refrigerate said liquid within a pre-determined temperature range, a freezing compartment in said casing, a plurality of secondary evaporators disposed at lower level than said casing, a body of insulating material between said casing and said secondary evaporators, means forming individual passages entirely



within said body of insulation and adapted to admit quantities of said liquid from said body to said secondary evaporators, individual thermostatic means operable in accordance with the individual temperatures of said secondary evaporators to control said admissions, the upper limit of said pre-determined temperature range being below any of said individual temperatures, and individual vapor conduits exterior to said insulation and in open communication from said secondary evaporators to said casing.

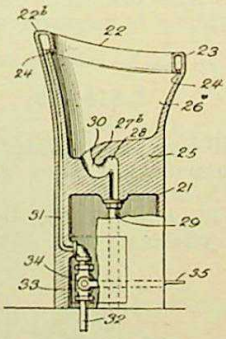
2,310,658

URINAL

Lucile Strite and Gertrude U. Small, Washington, D. C.

Application December 22, 1939, Serial No. 310,642

2 Claims. (Cl. 4—102)



1. A urinal including a hollow body of transversely elongated and narrowed formation as well as vertically elongated; said body having a reservoir in its upper portion and its top open and inclined in one direction; means extending upwardly in the lower portion of said body to receive and carry off the contents of said reservoir; means extending upwardly in the lower portion of said body to provide for flushing of said reservoir; and means projecting to the exterior of said body for controlling the flushing of said reservoir.

2,310,659

RECOVERY OF LOW-BOILING ORGANIC COMPOUNDS FROM COKE OVEN BY-PRODUCTS

Frederick M. Thatcher, Clairton, and Joseph H. Wells and Philip J. Wilson, Jr., Pittsburgh, Pa.; said Wells and said Wilson assignors to Carnegie-Illinois Steel Corporation, a corporation of New Jersey

No Drawing. Application January 22, 1942, Serial No. 427,842

3 Claims. (Cl. 260—666)

3. A method of recovering cyclopentadiene from coke oven by-product vapors containing the same, comprising scrubbing said vapors with liquid dicyclopentadiene to dissolve said cyclopentadiene therein, converting said dissolved cyclopentadiene to dicyclopentadiene and reusing the latter in liquid phase for scrubbing more of said vapors.

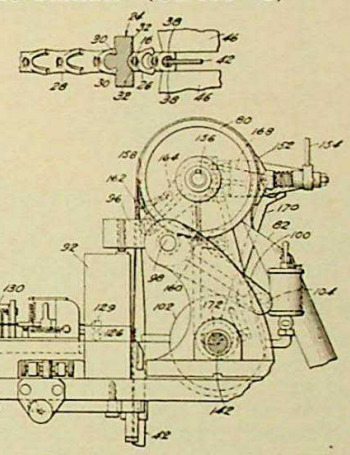
2,310,660

MACHINE AND METHOD FOR MAKING SLIDE FASTENERS

Frederick Ulrich, Bayonne, N. J., assignor to Conmar Products Corporation, Bayonne, N. J., a corporation of New Jersey

Application March 28, 1939, Serial No. 264,552

10 Claims. (Cl. 153—1)



5. Apparatus for the manufacture of slide fastener elements, said apparatus comprising means to intermittently feed a wire made up of integrally related embryo fastener element, said elements having heads which are wider than the space between the spread jaws, and punch and die mechanism for cutting away a single piece of scrap or waste material between the head of one element and the jaws of the next element, said punch being of such configuration as to define the head of one element and the jaws of the next element and to notch the head with a doubly reversed contour defining a projecting center portion and two shoulders, the center portion being dimensioned to be received between the ends of the jaws of the next element, with the said ends abutting the shoulders, guides adjacent said punch for guiding the severed elements in end to end relation, the stroke of the wire feed means being such as to keep the severed elements in nested relation with the notched head of one partially received between the jaws of the next in order to prevent improper orientation of the elements.

2,310,661

SORTING MACHINE

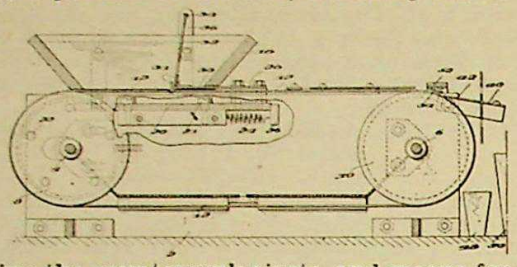
Herman E. Veit, Parkville, Md., assignor to The Glenn L. Martin Company, Baltimore, Md.

Application May 14, 1940, Serial No. 335,042

20 Claims. (Cl. 209—90)

20. In a machine for sorting round head and

countersunk head rivets, means forming a slot, means for feeding said rivets along said slot with their stems extending into the slot, means adjacent a portion of the slot, including means for



tilting the countersunk rivets, and means for engaging the tilted heads of said countersunk rivets for removing the same from the slot, while permitting the round head rivets to pass.

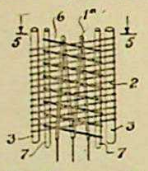
2,310,662

ELECTRODE SPACER

Charles P. Vogel, Millburn, N. J., assignor to Radio Corporation of America, a corporation of Delaware

Application February 5, 1942, Serial No. 429,593

5 Claims. (Cl. 250—27.5)



1. An electron discharge device comprising an elongated cathode, a plurality of spaced parallel wires covered with an electrical insulating coating, the insulated wires being disposed across and in contact with the side of said cathode, a plurality of spaced parallel control grid wires in a plane parallel to the plane of the insulated wires, the grid wires being disposed at an angle to the insulated wires, the insulated and the grid wires being in contact at their cross-over points, and an anode outward from said control wires.

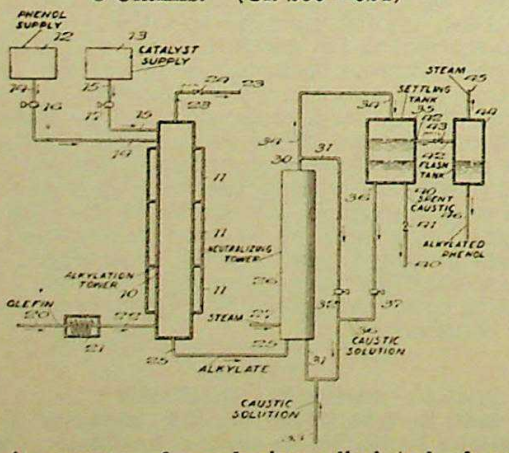
2,310,663

PRODUCTION OF ALKYLATED PHENOLS

William Whitney Weinrich, Oakmont, and Edward J. Loew, Lansdowne, Pa., assignors to Gulf Research & Development Company, Pittsburgh, Pa., a corporation of Delaware

Application June 3, 1940, Serial No. 338,632

8 Claims. (Cl. 260—624)



1. A process of producing alkylated phenols, comprising contacting a phenol in the presence of a catalyst selected from the group consisting of sulfuric acid and the alkyl esters of sulfuric acid with a tertiary olefin and removing the acid and acid-forming components from the reaction mixture by washing with a dilute aqueous alkali solution at a temperature above 100° C. and under superatmospheric pressure, said temperature being sufficiently high to maintain a substantial superatmospheric steam pressure less than about 125 pounds per square inch gage.

2,310,664

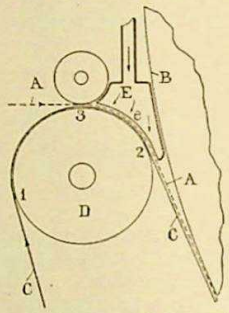
PROCESS FOR SHRINKING TEXTILE FABRICS

Francis Edward Mason, Manchester, England, assignor to The Yorkshire Dyeing and Proofing Company Limited, Middleton, England

Application May 18, 1942, Serial No. 443,511

In Great Britain June 17, 1941

1 Claim. (Cl. 26—18.6)



A process for shrinking textile fabrics consisting in passing an endless travelling blanket over a portion of the circumference of a roller of small diameter whereby the outer surface of the blanket is first expanded and then contracted, leading the fabric into contact with the blanket at or after the point where contraction of the surface of the latter commences, causing the fabric to adhere to the surface of the blanket during its contraction by air under pressure directed onto the outer surface of the fabric whereby the fabric will contract with the blanket and finally setting the shrinkage caused by said contraction by immediately passing the blanket and fabric around a heated drying cylinder of large diameter with the fabric in contact with the cylinder and the blanket outside the fabric whereby the fabric is pressed onto the cylinder.

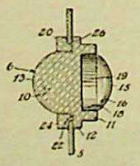
2,310,665

SIGN

Harold W. Williams, Scarsdale, N. Y., assignor to Lumelite Corporation, New York, N. Y., a corporation of New York

Application March 7, 1941, Serial No. 382,183

13 Claims. (Cl. 40—130)



1. A sign comprising a panel provided with a plurality of spaced holes arranged in accordance with the desired indicia and a light ray reflecting and transmitting stud disposed in each hole, said stud having a head positioned in said hole and projecting forwardly therefrom, said hole having a diameter larger than said head, said stud having a shoulder engaging the rear face of said panel adjacent said hole, said stud having a hollow skirt, a reflecting element positioned in said

skirt, and a light ray transmitting locking ring positioned in said hole and engaging the peripheral wall of said head to secure said head in position.

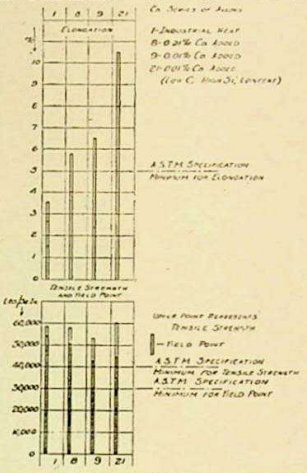
2,310,666

MALLEABLE CAST IRON

Nicholas A. Ziegler and Homer W. Northrup, Chicago, Ill., assignors to Crane Co., Chicago, Ill., a corporation of Illinois

Application December 4, 1941, Serial No. 421,584

2 Claims. (Cl. 75—123)



1. A white cast iron of the character described comprising the following elements as essential constituents in approximately the proportions given: silicon 0.5–2.5%; manganese 0.3–1.0% sulphur 0.2% maximum; phosphorus 0.4% maximum; carbon 1.5–3.5%, and columbium added in proportions of from a trace up to 0.5%, the remainder being substantially iron.

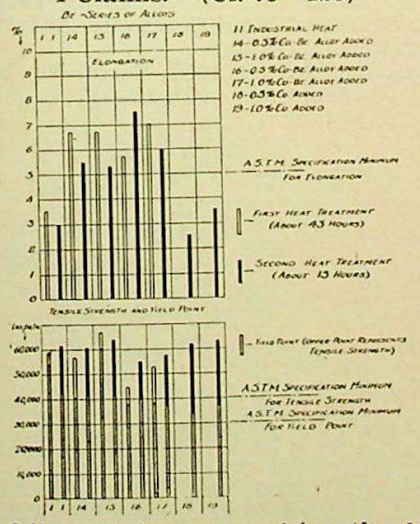
2,310,667

MALLEABLE CAST IRON

Nicholas A. Ziegler and Homer W. Northrup, Chicago, Ill., assignors to Crane Co., Chicago, Ill., a corporation of Illinois

Application December 4, 1941, Serial No. 421,585

4 Claims. (Cl. 75—125)



1. A white cast iron comprising the following elements as essential constituents in approximately the proportions given: silicon 0.5–2.5%, manganese 0.3–1.0%, sulphur 0.2% maximum, phosphorus 0.4% maximum, carbon 1.5–3.5%, to which a copper-base alloy, containing beryllium in amounts up to 4.0%, is added in amounts from a trace up to 5.0%, the remainder being iron.

2,310,668

REVERSE TWIST BARBWIRE

Henry A. Nelson, De Kalb, Ill.

Original application June 16, 1939, Serial No. 279,545. Divided and this application March 21, 1940, Serial No. 325,251

2 Claims. (Cl. 256—6)

1. Barbwire comprising a plurality of strands, some of which carry barbs, the strands being reversely twisted midway between adjacent barbs whereby the tendency of the barbs to turn relatively to one another is negatived by the reversely twisted portions.

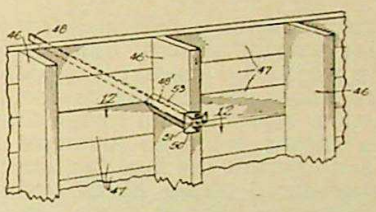
2,310,669

CONCRETE FORM

George B. Bosco, Chicago, Ill.

Application May 27, 1939, Serial No. 276,066

1 Claim. (Cl. 25—131)



For use in a concrete form structure which includes upright wall elements, means for bonding together the side walls of the form, comprising apertured flat metal washers adapted to overlie the outer edges of said upright wall elements, tie members adapted to extend between and through said walls and the apertures of said washers and bent to overlap the latter, each of said tie members having a flat end portion in lateral contact with one of said upright wall elements, and a V-shaped brace attached to each washer and extending at right angles thereto in contact with the upright wall element against which said flat end portion of the tie member lies and covering the part of said flat end portion lying against said upright element.

2,310,670

LUBRICANT COMPOSITION

Darwin E. Badertscher and George S. Crandall, Woodbury, and Francis M. Seger, Pitman, N. J., assignors to Socony-Vacuum Oil Company, Incorporated, New York, N. Y., a corporation of New York

No Drawing. Application September 21, 1940, Serial No. 357,750

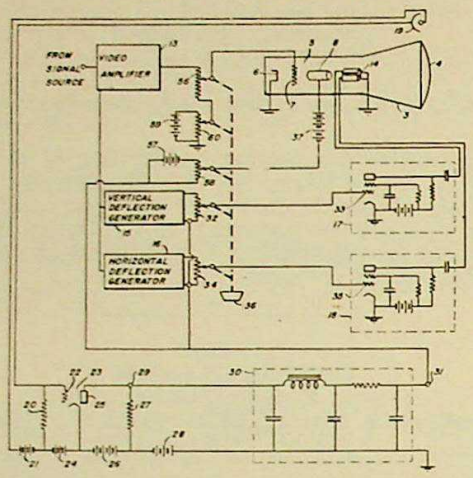
4 Claims. (Cl. 252—47)

1. A lubricating oil which normally develops products corrosive to bearing metals having the corrosion-susceptibility of cadmium-silver alloys under the conditions encountered in internal combustion engines and in admixture therewith a minor proportion of a thiocyanate having the general formula

$$R_2-\overset{\displaystyle R_1}{\underset{\displaystyle R_3}{\overset{|}{\underset{|}{C}}}}-SCN$$

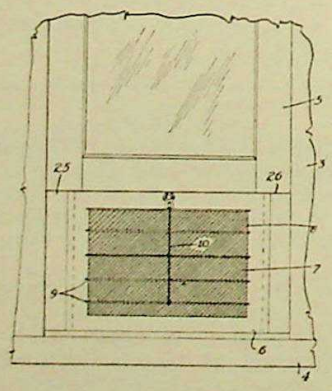
wherein R_1, R_2 and R_3 represent aromatic hydrocarbon radicals, said compound being present in an amount sufficient to inhibit said corrosive action.

2,310,671
IMAGE PRODUCER
John C. Batchelor, Hastings on Hudson, N. Y.
Application February 12, 1941, Serial No. 378,520
10 Claims. (Cl. 178—7.5)



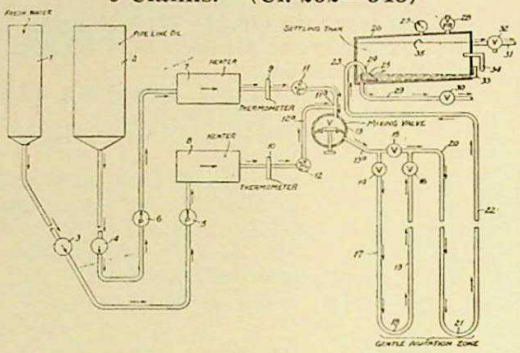
1. Image producing apparatus adapted to compensate for varying general illumination in the location in which the apparatus is operated comprising an image screen, means for energizing said screen to reproduce an image thereon, said energizing means being so arranged and constructed as to permit the modification of the size of said reproduced image, light sensitive means disposed to receive light at a level corresponding to the general illumination level and arranged to generate control signals varying in accordance with said illumination level, and means for causing said generated signals to decrease the size of said reproduced image as said general illumination level increases.

2,310,672
WINDOW CLOSURE
Frank Beachy, Swissvale, Pa.
Application May 4, 1942, Serial No. 441,587
8 Claims. (Cl. 160—5)



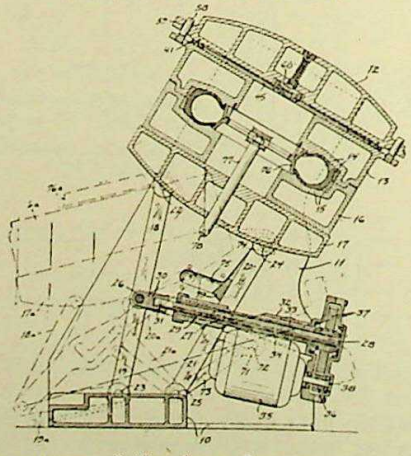
1. Shutter apparatus comprising a frame, outwardly-extending slats pivotally connected to the frame at their inner edges, a lifting member pivotally connected to the outer edges of the slats and adapted to normally hold them in horizontally-extended and vertically spaced relation, a holding element pivotally connected to a fixed support, a destructible holding member for maintaining the lifting member and the said element in connected relation, and stop means for limiting relative vibratory movements of the lifting member and holding element, independently of said destructible member.

2,310,673
PROCESS FOR TREATING PIPELINE OIL
Charles M. Blair, Jr., Webster Groves, Mo., assignor to Petrolite Corporation, Ltd., Wilmington, Del., a corporation of Delaware
Application April 22, 1942, Serial No. 440,097
6 Claims. (Cl. 252—348)



1. A process for reducing the inorganic salt content of pipeline oil of the kind for which the ratio of A. P. I. gravity to spreading co-efficient on distilled water is equal to or greater than 1.9, which comprises mixing fresh water with such pipeline oil in such a manner as to produce an admixture in which a major portion of the original water droplets co-exist with but are not combined with the droplets of the added water, heating at least the oil of the admixture to bring the admixture to a suitable elevated breaking temperature, subjecting the heated admixture to a period of gentle agitation characterized by a Reynolds number of between 2,100 and 300,000, for a period of from 2 to 30 minutes to effect coalescence to a large extent of the original water droplets with the co-existing water droplets, accompanied by coalescence of the added water droplets so that the coalesced water masses will remove the greater part of the salt content of the original pipeline oil, settling the admixture and separating the oil and water phases.

2,310,674
TOGGLE PRESS
Henry C. Bostwick, Akron, Ohio, assignor to Akron Standard Mold Company, Akron, Ohio, a corporation of Ohio
Application May 28, 1937, Serial No. 145,241
8 Claims. (Cl. 18—17)



6. In a press of the type having an upper and a lower mold member, means including a frame for guiding and moving one of the members a considerable distance relative to the other member to open and close the press, means for guiding the other mold member for reciprocating

movement, there being an expansible fluid chamber disposed adjacent the last-mentioned mold member and adapted to effect an independent movement of the same in a direction toward the other mold member when the press is closed, controlling means for operating fluid in the chamber, said last named means comprising a conduit communicating with the chamber and a releasing valve for allowing escape of pressure fluid from the chamber, said releasing valve being actuated in an opening direction consequent upon a predetermined independent movement of the mold member aforesaid, whereby when the press is opened, the pressure fluid is released from the chamber.

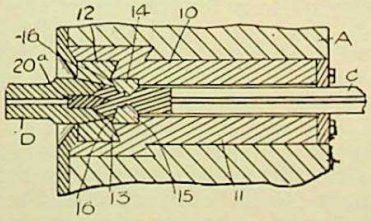
8. In a press, the combination of a frame, an upper press head carried by the frame, and a lower press head movable with respect to the upper head, a pair of toggle members pivotally connected to the lower head and to the frame respectively, and each having an intermediate pivot, a screw shaft pivotally connected to one of the intermediate pivots, a motor pivotally supported on the frame, gearing operatively connecting the motor to the screw shaft, a system of linkage including a member connected to the intermediate pivot of one toggle and having a cam slot coacting with the intermediate pivot of the other toggle for connecting the intermediate pivots together so as to cause movement of them in timed relationship to the movement of the lower head, and guiding means for the lower head, said means including a cam slot in the frame and a member connected to the lower head and coacting with the cam slot in the frame to impart a tilting movement of the head during the opening and closing operation of the press.

2,310,675

METHOD OF FORGING AND REFINISHING DETACHABLE BITS AND THE LIKE AND APPARATUS THEREFOR

George Edmund Boyce, South Porcupine, Ontario, Canada, assignor to International Detachable Bits & Equipment Limited, South Porcupine, Ontario, Canada, a company of Ontario

Application January 28, 1942, Serial No. 428,606
In Canada July 22, 1941
8 Claims. (Cl. 76—108)



1. Apparatus for forming or reconditioning detachable drill bits and the like comprising in combination, a clamping die, a plurality of coacting sections forming an open-mouthed die cavity having side walls and a base, a plurality of circumferentially spaced apart rib-like members extending along the walls of the cavity substantially from its mouth to its base and protruding thereinto, and a dolly having a forming nose to engage hot metal in the cavity, said dolly having a plurality of axially extending circumferentially spaced apart grooves in its outer surface corresponding in number to the rib-like members and adapted to straddle the latter when said dolly has projected into the cavity to act upon the hot metal contained therein.

2,310,676

RUBBER COATING

Paul L. Bush and Dale E. Lovell, Mishawaka, Ind., assignors to Mishawaka Rubber and Woolen Manufacturing Company, Mishawaka, Ind., a corporation of Indiana

No Drawing. Application July 10, 1939, Serial No. 283,638
8 Claims. (Cl. 117—139)

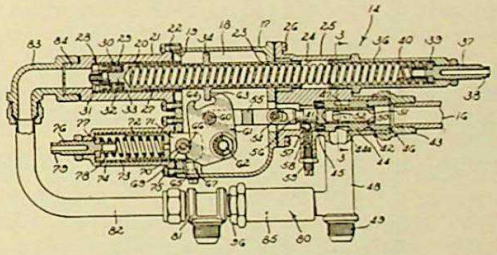
8. In the making of a lacquer coated vulcanized rubber product by coating the unvulcanized rubber with a nitrocellulose lacquer and subsequently conjointly baking the lacquer and vulcanizing the rubber, the method of counteracting the lacquer retardation of the rubber cure which comprises incorporating in the nitrocellulose lacquer prior to coating the rubber therewith a quantity of sulphur and at least one vulcanization accelerator, said materials acting to counteract retardation of the rubber cure by the lacquer when the coated product is subjected to vulcanization and baking temperatures.

2,310,677

REGULATING VALVE

Rodney B. Campbell, Los Angeles, Calif., assignor to John Eley, Jr., Los Angeles, Calif.

Application February 28, 1939, Serial No. 258,975
5 Claims. (Cl. 137—53)



1. In a valve device of the character described, the combination of: a housing having an aperture in one wall thereof; cylinder means attached to said housing so as to close said aperture; a piston in said cylinder means and having a piston member extending into said housing, said aperture being of such size that said piston and said piston member may be withdrawn from said housing through said aperture when said cylinder means is detached from said housing; spring means in said housing and engaging said piston so as to urge it in one direction in said cylinder means; a fluid passage adapted to convey an operating fluid under pressure; a pressure relief passage; valve means associated with said housing and adapted to connect said fluid passage and said pressure relief passage, said valve means having a part extending into said housing; connecting means in said housing for operatively connecting said piston member and said part; and passage means providing fluid communication between said fluid passage and the outer end of said cylinder means.

2,310,678

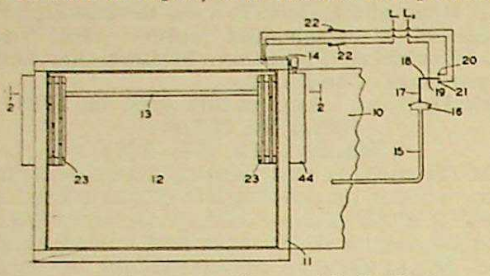
BAROMETRIC REGULATOR

Morris W. Crew and John W. Meyer, Shaker Heights, Ohio, assignors to The Hotstream Heater Company, Cleveland, Ohio, a corporation of Ohio

Application March 15, 1941, Serial No. 383,651
11 Claims. (Cl. 137—152)

1. In combination, a draft damper, a shaft extending adjacent one face of said damper, means mounting said damper pivotally on said shaft,

said means being shiftable in a plane along the face of said damper, and means independent of



said damper for mounting said shaft for movement parallel to said plane.

2,310,679

OXYALKYLATED LECITHIN AND METHOD OF MAKING SAME

Melvin De Groote and Bernhard Keiser, St. Louis, Mo., assignors to Petrolite Corporation, Ltd., Wilmington, Del., a corporation of Delaware

No Drawing. Application April 27, 1942, Serial No. 440,748

5 Claims. (Cl. 260—403)

1. A new chemical compound, consisting of an oxyalkylated phosphatide.

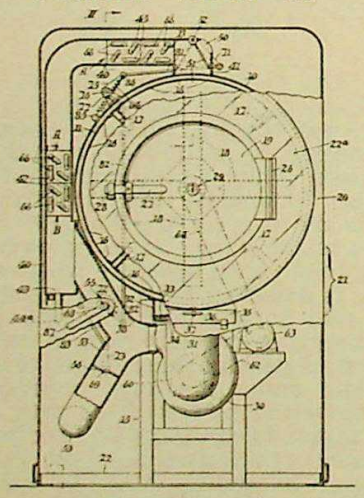
2,310,680

SOLVENT SAVER

Clarence F. Dinley, Detroit, Mich., assignor, by mesne assignments, to Detroit Rex Products Company, Detroit, Mich., a corporation of Michigan

Application May 28, 1940, Serial No. 337,574

8 Claims. (Cl. 34—74)



1. Apparatus of the character described, for recovering volatile solvents from material that has been treated therewith, comprising a treating chamber with a door in its front for the introduction and withdrawal of goods to be treated; a rotating foraminous-walled tumbling drum for the goods in said treating chamber, with an end opening adjacent said door; a rotary fan adjacent said treating chamber, with its suction intake connected into the latter below said drum; a lint filter removably mounted in said intake connection, between the fan and said drum; a delivery conduit from said fan extending upward past said treating chamber and connected into the latter above said drum; an air heater mounted in said conduit over said drum, adjacent the connection of the conduit into said drum; a condenser interposed in said conduit between said fan and heater, with means for drawing off the condensate therefrom; and an air intake and an air vent for said conduit between said heater and drum and between said fan and said condenser, respectively, with valve means for opening and closing them and for preventing chimney circulation of air through the conduit between them when they are open.

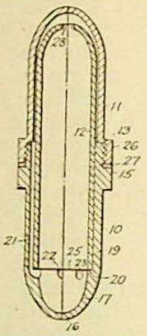
2,310,681

INHALER

Philip A. Derham and Jesse H. Newport, Jr., Rosemont Pa., assignors to Victor Metal Products Corporation, Brooklyn, N. Y., a corporation of New York

Application March 4, 1942, Serial No. 433,312

2 Claims. (Cl. 128—200)



1. An inhaler comprising a molded tubular base closed at one end and open and externally threaded at the other end and having an annular outer finger-grip enlargement below and adjacent to the threaded end, the inner surface of said base having a plurality of spaced longitudinal grooves therein extending partway through the thickness of and terminating above the closed end of the base, a shoulder projecting inwardly from said inner surface above the lower ends of the grooves, said shoulder constituting a seat, a molded cap of substantially the same outermost shape as the base open at its lower end and closed at its upper end, the lower end portion of the cap being internally threaded to receive the externally threaded part of the base, said cap having an annular outer finger-grip enlargement corresponding to the enlargement of said base, and a molded inner medicament-receiving tube of less length than the combined lengths of said cap and base, the outermost diameter of said tube being substantially equal to the diameter of the inner surface of said base and slightly less than the diameter of the inner surface of the cap, the lower end of said tube being adapted to seat on the shoulder of the base and said tube being removably inserted into said base in frictional contact with the inner surface of the base to provide air passages through the grooves and the tube when the cap is removed, said enlargements cooperating to seal said passages when the cap is in place.

2,310,682

METHOD AND APPARATUS FOR SELECTING FERTILE FROM INFERTILE EGGS

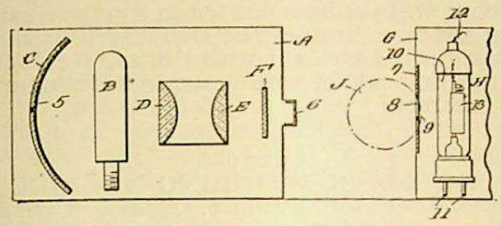
William D. Dooley, Springfield, Ohio, assignor to Joseph B. Cartmell, Springfield, Ohio

Application October 10, 1939, Serial No. 298,841

19 Claims. (Cl. 88—14.1)

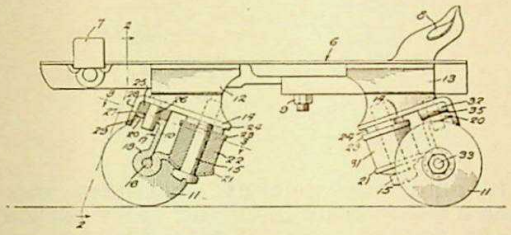
7. The method of selecting a fertile from an infertile egg without breaking or impairing the egg in any respect whatsoever, which includes the step of determining the degree by volume to which

the interior contents of said egg are saturated with carbon dioxide gas, and comparing said find-



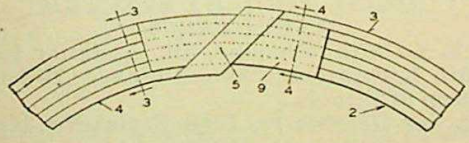
ing with the carbon dioxide saturation of an infertile egg.

2,310,683
SKATE
John Thomas Enley, Riverside, N. J., assignor to Metal Craft Manufacturing Company, a corporation of New Jersey
Application July 19, 1940, Serial No. 346,449
6 Claims. (Cl. 280—11.28)



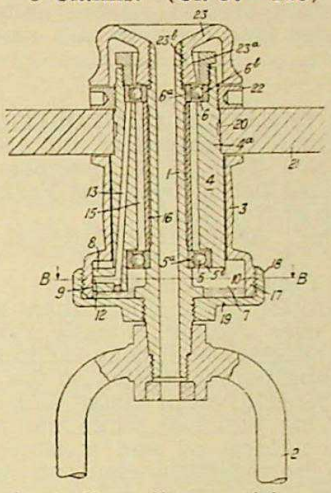
3. A roller mounting for roller skates and the like comprising, a foot rest having a bracket depending therefrom, a truck to carry an axle and rollers and means to attach the truck to the bracket comprising, resilient means between the truck and bracket, pivot and guide pins passing loosely through openings in the truck, and a flange against which one end of the truck abuts, the said pivot pin, guide pin and flange being carried by the bracket and being arranged parallel to one another and at a small angle to the vertical.

2,310,684
INDUCTIVE WINDING
Otis T. Farry, University City, Mo., assignor to Wagner Electric Corporation, St. Louis, Mo., a corporation of Delaware
Application May 31, 1940, Serial No. 338,015
3 Claims. (Cl. 175—362)



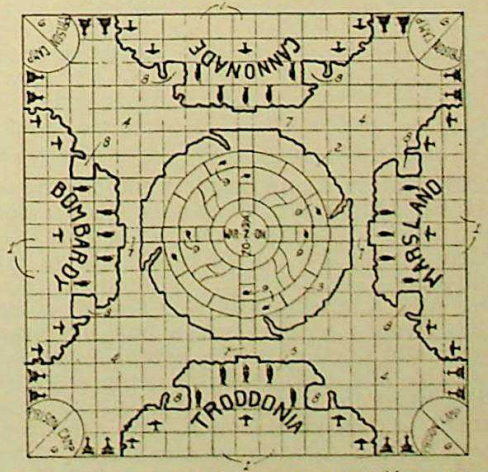
1. An inductive winding for electrical apparatus comprising a plurality of coils formed of rectangular strands wound concentrically face-to-face one upon another, said strands being transposed to secure uniform total length of each strand, said transposition taking place at substantially uniform intervals in the length of the winding and changing the position of only one strand at each point of transposition, said transposition being secured by an integral loop formed in the strand by twisting it through an angle of 180°, said loop being positioned astride the untransposed strands with the same side of the transposed strand toward the inner and outer peripheries of said untransposed strands.

2,310,685
WHARVE-DRIVEN FLIER SPINDLE
Gordon Scott Fraser, Arbroath, Angus, Scotland, assignor to Douglas Fraser & Sons Limited, Arbroath, Angus, Scotland, a corporation of Great Britain
Application March 30, 1942, Serial No. 436,805
In Great Britain April 10, 1941
3 Claims. (Cl. 57—115)



1. A flier spindle unit comprising a hollow vertical spindle, a flier suspended from the lower end of said spindle, a hollow driving wharve fixed to said spindle between the upper and lower ends of said spindle, a lubricant-containing sump at the base of said wharve, said sump rotating with said wharve, a bearing housing surrounded by said wharve, upper and lower spindle bearings within said housing, said housing formed with a duct extending to said upper bearing, said housing also formed with a port open to said sump and communicating with said duct, a stationary member located within said sump, and a part rotating with said spindle and forming with said stationary member a lubricant trap along which lubricant is frictionally swept by said rotating part and by way of said port to said duct and through said duct to said upper bearing.

2,310,686
GAME
Lloyd Watson Freer, Superior, Wis.
Application October 25, 1940, Serial No. 362,832
3 Claims. (Cl. 273—134)



1. In a game board for cooperative use with a plurality of groups of playing units representative of war instrumentalities, characterized by

having a central circular area designated as "no-man's-land" wholly surrounded by a single irregularly shaped area designated as water and separating same from a plurality of other individual land areas about said central area and further characterized by said central area having radially disposed restricted passageways extending towards each of said individual land areas and through said water area defining passageways for certain of said playing units enroute from said outer land areas to said central area.

2,310,687

HAIR TREATING COMPOSITION

George Friedman, Brightwaters, and Abraham R. Goldfarb, New York, N. Y., assignors to Lawrence Richard Bruce, Inc., New York, N. Y., a corporation of New York

No Drawing. Application March 26, 1940, Serial No. 326,082

3 Claims. (Cl. 167—87.1)

1. A preparation for the permanent waving of hair, stable over normal climatic ranges, and providing on application of heat, the formation of a protective and porous coating on the hair permitting the penetration of steam and the vapor of a hair waving principal, while maintaining in the hair the natural oil and moisture thereof, comprising a homogeneous emulsion ranging in viscosity from free-flowing to paste conformation and containing a fatty alcohol adsorbent medium having more than twelve carbon atoms, a fatty ester dispersing agent, a sulphite waving principal, and a hydrolizable supporting colloid therefor.

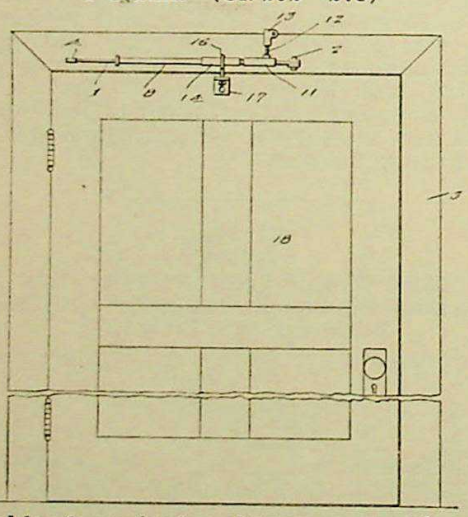
2,310,688

DOOR OR WINDOW HOLDER

Charles Edward Fuller, Dothan, Ala.

Application February 20, 1942, Serial No. 431,756

1 Claim. (Cl. 292—275)



A holder for swinging closures comprising a rod for pivotal connection at one end to a closure frame, a head on the other end of the rod, a tubular extension slidable on the rod, a sleeve, having a longitudinal slot therein, mounted on the extension, said extension and said sleeve including abutting flanges on one end, a bushing fixed in the other end portion of the extension and slidable on the rod, said bushing being engageable with the head for positively limiting the sliding movement of the extension in one direction on said rod, a slide operable on the sleeve, a key in said slide operable in the slot, an eye bolt fixed on the slide, means for rotatably mounting said eye bolt on a swinging closure, said slide being engageable with one of the flanges for actuating the extension and the sleeve in said one direction on the rod, a tube mounted on the sleeve, and a set screw threadedly mounted in the tube, said set screw passing through the slot and into the extension for engagement with the rod for frictionally securing said extension against sliding movement thereon.

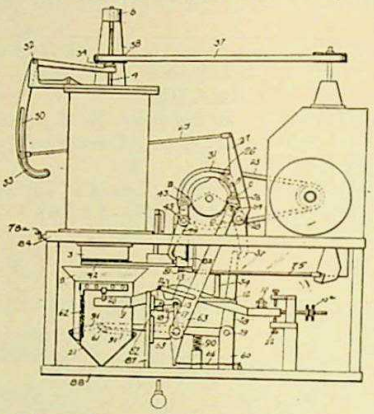
2,310,689

AUTOMATIC WEIGHING MACHINE

Ansel B. Gibson, Toronto, Ontario, Canada

Application February 27, 1939, Serial No. 258,599

8 Claims. (Cl. 249—42)



1. In automatic weighing machines and including a weigh beam, a cut-off valve adapted to stop the flow of material into a weigh bucket carried on one end of said weigh beam; latching means adapted to hold said cut-off valve open during each weighing operation; means actuated by balancing said weigh beam adapted to trip said latching means to permit the closing of said cut-off valve, and means actuated by the closing of said cut-off valve to commence the sequence of operations preparatory to each weighing operation which comprises a clutch engageable with a constantly rotating driving member, lever means for engaging said clutch by the closing of said cut-off valve, means for disengaging said clutch at the completion of a single revolution thereof, means for disengaging said lever means to permit the manual control of the engagement of said single revolution clutch of the driving member, and means for preventing the movement of said manual control until the closing of said cut-off valve is effected.

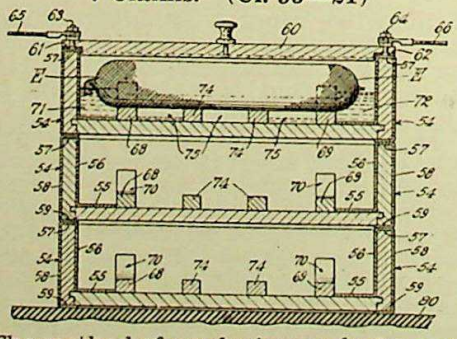
2,310,690

COOKING FOOD BY ELECTRIC CONDUCTANCE

Enoch L. Griffith, Chicago, Ill., assignor to The Griffith Laboratories, Inc., Chicago, Ill., a corporation of Illinois

Application October 19, 1940, Serial No. 361,841

7 Claims. (Cl. 53—21)



1. The method of producing cooked meat prod-

ucts in cellulosic casings, which comprises wetting the cellulosic casing with a solution of electrolyte, placing opposite portions of the article in contact with an electrolyte solution while avoiding submergence of all the article, converging an electric current through the electrolyte towards said portions of the article to pass a cooking current through the article, confining water vapor over the exposed surface of the article, and continuing the current to effect cooking of the article, the water vapor avoiding the drying of the exposed surface tending to result from the rising temperature of the article.

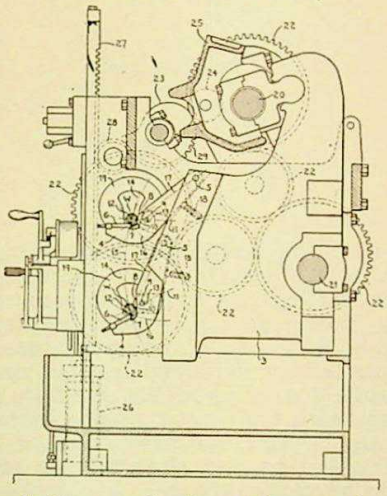
2,310,691

TOOLHOLDER FOR LATHES

William F. Groene, Cincinnati, Ohio, assignor to The R. K. LeBlond Machine Tool Company, Cincinnati, Ohio, a corporation of Delaware

Application December 31, 1940, Serial No. 372,624

6 Claims. (Cl. 82—9)



1. In a lathe; a tool carrier; a tool holder floatingly mounted on said carrier; a cutting tool fixed in said holder; having its cutting edge arranged to be fed radially of the axis of rotation of a work piece in said lathe; a work contacting portion on said tool holder engaging said work pieec at a point substantially 90 degrees circumferentially removed from the point of contact of the cutting edge of said cutting tool with said work piece; and floating mounting means for said tool holder, located so that the point of contact of said tool holder with the work surface and the cutting edge of said cutting tool lie in a plane parallel to the axis of rotation of the work piece and substantially perpendicular to the direction of floating movement of the cutting edge of said tool relative to said work piece.

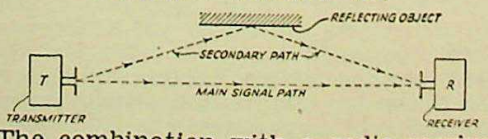
2,310,692

METHOD OF AND MEANS FOR REDUCING MULTIPLE SIGNALS

Clarence W. Hansell, Port Jefferson, N. Y., assignor to Radio Corporation of America, a corporation of Delaware

Application June 16, 1939, Serial No. 279,402

5 Claims. (Cl. 250—20)



1. The combination with a radio receiver, of means for reducing a multi-received signal due to rays received over two different paths comprising a section of two-conductor line having solely one end connected to said receiver for withdrawing from said receiver at said one end and reintroducing at said same end a portion of the received signal wave, said section of line having a physical length which is equal substantially to one-half the difference in effective path length of the two paths of the rays reaching the receiver, said line at its other end having its conductors connected together, and an adjustable impedance element between the receiver and said line for controlling the magnitude of the portion of the signal reintroduced.

2,310,693

SATIN WHITE AND METHOD OF MAKING THE SAME

Gerald Haywood, Western Port, Md., assignor to West Virginia Pulp and Paper Company, New York, N. Y., a corporation of Delaware

No Drawing. Application June 12, 1942, Serial No. 446,825

14 Claims. (Cl. 106—306)

1. A method of producing a pigment substance which comprises dissolving alum in water, dissolving sulfur dioxide in the resulting alum solution, and adding the solution of alum and sulfur dioxide to a milk of lime suspension.

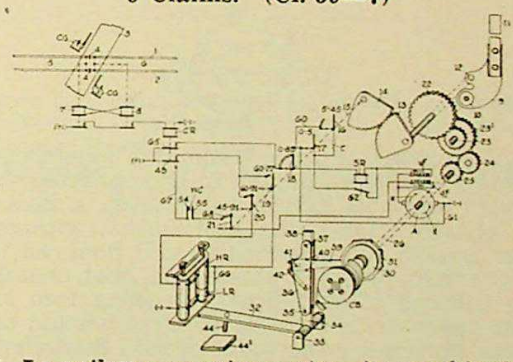
2,310,694

HIGHWAY CROSSING GATE FOR RAILROADS

William S. Henry, Chili, N. Y., assignor to General Railway Signal Company, Rochester, N. Y.

Application July 19, 1940, Serial No. 346,397

9 Claims. (Cl. 39—7)



1. In railway crossing gates, in combination, a gate movable from stop to clear position, and, normally, under the influence of gravity, from clear to stop position, a reversible motor operatively connected to the gate, and current means controlling the motor to drive the gate from stop to clear position, and controlling means separate from the motor and responsive to ambient conditions to close a circuit for energizing the motor and cause it to move the gate from clear to stop position only if gravity be undependable to cause such operation.

2,310,695

OSCILLATING SYSTEM

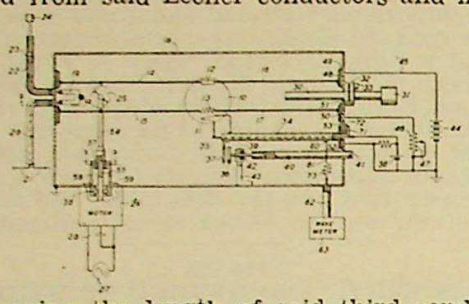
William H. C. Higgins, West Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York

Original application July 26, 1939, Serial No. 286,682, now Patent No. 2,261,879, dated November 4, 1941. Divided and this application September 30, 1941, Serial No. 412,940

4 Claims. (Cl. 250—36)

3. A tuning arrangement comprising a pair of Lecher conductors of fixed length, a conductive box substantially enclosing said Lecher conductors, a third conductor projecting into the inte-

rior of said box and extending adjacent to but spaced from said Lecher conductors and means



for varying the length of said third conductor so projected, thereby varying the resonant frequency of the system.

2,310,696

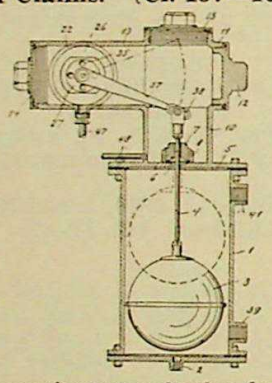
AUTOMATIC WATER FEEDER FOR BOILERS

William Homfeldt, Azcapotzalco, D. F., Mexico

Application February 25, 1941, Serial No. 380,559

In Mexico May 6, 1940

4 Claims. (Cl. 137—101)



1. An automatic water feeder for boilers, comprising a chamber adapted to be connected with a boiler below its lowest water level, a float in said chamber for rising and falling with said water level, a rod attached to said float, an upper chamber provided above said float chamber with the rod of said float extending into said upper chamber, a resilient packing around said rod for preventing the water of said float chamber from entering said upper chamber, a governor valve connected with said float and opened by the descent of said float, said governor valve being mounted in a separate detachable casing forming part of said upper chamber, and said governor valve comprising a conical closing member resting against a conical seat, both conical member and seat being provided with perforations parallel with the axis of said conical member, said perforations coinciding in the open position of the valve and not coinciding in the closed position of said valve, a spring pressing said conical member against its seat, a pipe for conducting dry steam from the boiler into said upper chamber and against the base of said conical valve closing member, means for deviating the steam from its straight course after having passed through the valve, and a pipe for conducting said steam, after its passage through said valve, to a water feed pump.

2,310,697

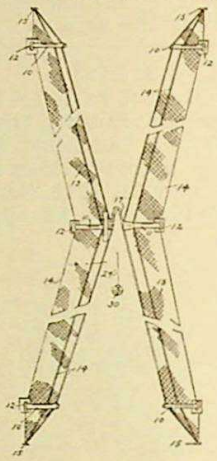
PICKUP DEVICE FOR AIRPLANES

William Howell, Winnipeg, Manitoba, Canada

Application June 24, 1941, Serial No. 399,535

1 Claim. (Cl. 258—1)

An aerial pick-up device comprising a pair of guide walls converging together intermediate their length to provide a relatively narrow guideway, a holder adjustably attached to one of said side walls adjacent the relatively narrow guideway having a longitudinal channel in its top surface parallel to the guideway, a load carrying member including a rod having a shank adapted to slidably engage in the channel of said holder, the intermediate part of said rod being reversely bent to form a hook bridging the guideway and adapted to receive the depending pick-up cable of



the airplane, a dog extending transversely of the channel of said holder pivotally mounted on said holder for vertical swinging movement, a rod depending from said dog extending through an opening in said holder, a spring mounted on said rod for exerting a downward tension on said rod whereby said dog is yieldably held in frictional engagement with the shank of the load carrying member, and a rack mounted on said holder in parallel relation to the channel for supporting the load to be picked up.

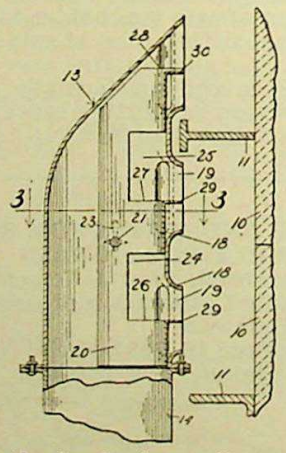
2,310,698

METHOD AND MEANS FOR FURNACE WALL MAINTENANCE

Charles S. Hulton, Cincinnati, Ohio, assignor to The Kirk & Blum Manufacturing Company, Cincinnati, Ohio, a corporation of Ohio

Application October 4, 1940, Serial No. 359,777

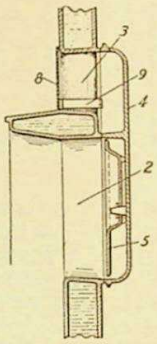
5 Claims. (Cl. 263—44)



1. The method of air cooling furnace walls and the like which comprises applying to the surface thereof cooling pressure air at spaced locations and in predetermined relatively low volume and at optimum efficient high velocity when the wall is new and thick whereby the rate of deterioration of the wall is retarded, maintaining

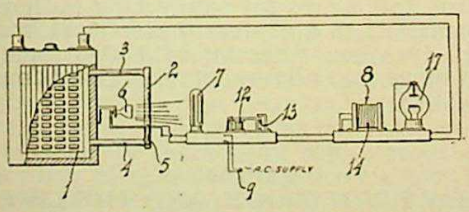
said pressure and velocity of the said air streams until the wall thickness has decreased under prolonged furnace operation, then increasing the volume of the air supply for said air streams and increasing the size of said air streams whereby optimum efficient surface temperature reduction is established at predetermined air velocity and volume for said reduced wall thickness whereby the rate of deterioration of the thinner wall is delayed.

2,310,699
FLUE DOOR SHIELD
Fredrik W. Hvoslef, Kohler, Wis.
Application June 14, 1941, Serial No. 398,086
1 Claim. (Cl. 110—173)



In combination, a boiler, the front of said boiler being formed to provide a firebox opening and a pair of flue cleanout openings, a water passageway separating said flue cleanout openings, a door adapted, when closed, to close both said firebox opening and said flue cleanout openings, a pair of baffle plates of a height greater than said flue cleanout openings adapted to abut the inner surface of said boiler adjacent said flue cleanout openings and a saddle attached to said baffle plates and adapted to overlie said water passageway whereby to hold said baffle plates in position to close said flue cleanout openings.

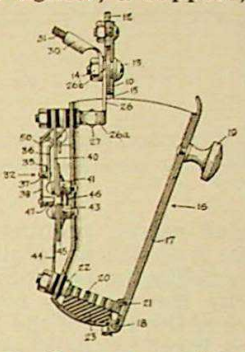
2,310,700
BATTERY CHARGER
Joie C. Knight, Long Beach, Calif.
Application September 11, 1940, Serial No. 356,253
2 Claims. (Cl. 171—314)



1. A system for controlling a battery charger comprising a wet battery, a charging means electrically connected to the battery, a photo-electric cell, means operable by the photo-electric cell and controlling the operation of the charger, a vertical glass tube, said tube being connected at the top and bottom to the electrolyte in the battery, a hydrometer float in said tube, said photo-electric cell being arranged on one side of the tube, a light source on the other side of said tube opposite the photo-electric cell, said hydrometer float controlling the light beam from the light source to the photo-electric cell.

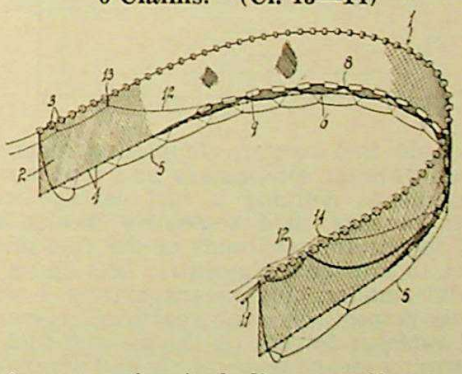
2,310,701
CIGAR LIGHTER
Herbert G. Lehmann, Wood-Ridge, N. J., assignor to Automatic Devices Corporation, Bridgeport, Conn., a corporation of Connecticut
Application January 12, 1939, Serial No. 250,471
12 Claims. (Cl. 219—32)

1. In a cigar lighter, a support; a compart-



ment mounted on the support for movement to a position wherein a cigar or cigarette can be readily inserted into the compartment; a heating element mounted in said compartment and against which the end of a cigar or cigarette rests when inserted therein; means for closing an energizing circuit to the heating element upon movement of the compartment into said cigarette-receiving position; an automatic means for maintaining the heating element at the desired usable heat as long as the compartment remains in cigarette-receiving position.

2,310,702
PURSE SEINE
Carmen Ljubetich, Dominic Ljubetich, and Frank Boskovich, San Pedro, Calif., and Andro Joncich, Everett, Wash.
Application June 11, 1940, Serial No. 339,900
6 Claims. (Cl. 43—14)

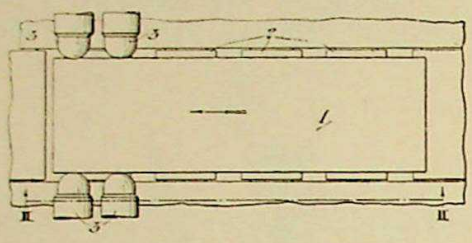


1. A purse seine including a wall net, a floor net extending transversely of the seine and adjacent the lower edge of the wall net, and float means mounted on the forward edge of the floor net, said float means being inflatable, and a hose extending to one of said float means, and a tube connecting adjacent float means.

2,310,703
METHOD OF TREATING STEEL
Lloyd F. McGlincy, Shaker Heights, Ohio, assignor to The American Steel and Wire Company of New Jersey, a corporation of New Jersey
Application January 8, 1941, Serial No. 373,667
2 Claims. (Cl. 148—2)

1. The method of treating steel which comprises molding the steel into an ingot; permitting the ingot to substantially solidify; stripping

the ingot from its mold; placing the ingot in a heated vessel; permitting the temperature of the ingot while in the heated vessel to be substantially equalized throughout to the temperature required for forging but materially below the temperature of solidification; removing the ingot



from the heated vessel; peening the surface of the ingot while it is still at forging temperature and materially below the temperature of solidification, whereby the scale is removed and the grain structure of the skin of the ingot is refined; and rolling the ingot to the desired shape while it is still at forging temperature.

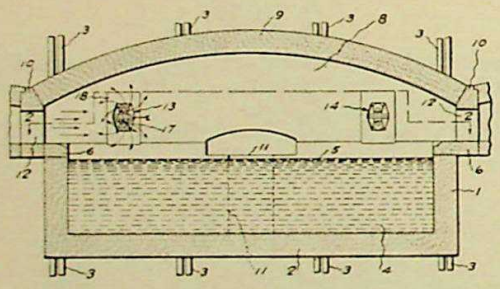
2,310,704

BURNER MEANS, ESPECIALLY FOR GLASS-MAKING FURNACES OR TANKS

Vergil Mulholland, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a corporation of Delaware

Original application December 16, 1939, Serial No. 309,584. Divided and this application May 2, 1940, Serial No. 332,922

2 Claims. (Cl. 299—143)



1. A fluid fuel burner, comprising means defining an annular air passage and separate and distinct means defining a fuel passage within said air passage, said respective means being formed at the forward ends of the fuel and air passages to provide a concentric hole and a substantially smaller plug means arranged within said hole respectively, and rearwardly diverging conical surfaces formed on the air and fuel passage-forming means respectively and arranged to seat one against the other in rear of said hole and plug means, whereby the means forming said fuel passage is disposed in non-binding relation with the air passage-forming means and so that the fuel passage forming means may be withdrawn from the remainder of the burner for cleaning and replacement without interference with the means forming the air passage, said air and fuel passages both terminating at the forward end of the burner in nozzle openings, the nozzle openings for the air and for the fuel respectively being such as to cause atomizing air to be discharged from the burner substantially in the surface of a cone and the fuel to be discharged from the burner also substantially in the surface of a cone, said cones respectively being such that streams of the discharged air and fluid fuel will intersect each other at a predetermined distance from the discharge end of said burner.

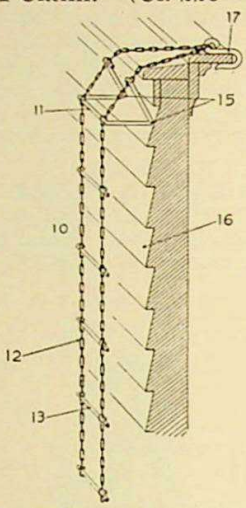
2,310,705

FIRE ESCAPE

Park Lester Newbold, Cedar Rapids, Iowa

Application March 25, 1941, Serial No. 385,113

1 Claim. (Cl. 228—40)



In a flexible ladder comprising spaced chains, a rung made of strip material secured to said chains and having its end portions bent to form rearward, V-shaped spacer elements having their free ends secured to the chains of the ladder.

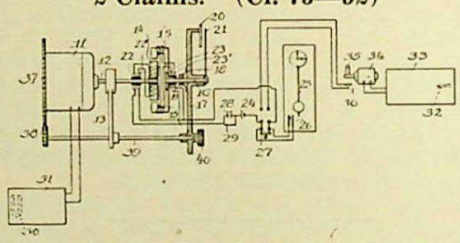
2,310,706

APPARATUS FOR COMPARING THE RATES OF REGULARLY RECURRING IMPULSES

Ernst Norrman, Delavan, Wis.

Application April 16, 1941, Serial No. 388,910

2 Claims. (Cl. 73—52)



1. Apparatus of the character described comprising in combination, a shaft, means to drive said shaft at a predetermined speed, an armature secured to said shaft to rotate therewith and having the form of an electromagnet, a second electromagnet rotatably mounted adjacent said armature, and means for connecting both of said electromagnets to a source of electrical impulses of brief duration, whereby said electromagnets tend to move into alignment when said impulses are effective.

2,310,707

DIARY, NOTEBOOK, AND THE LIKE

William Kinnell Petrie, Angus, Scotland

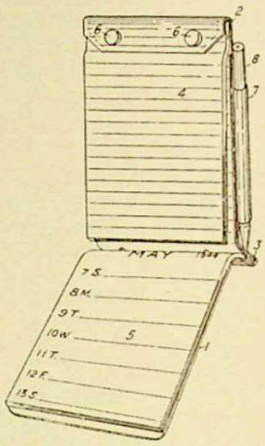
Application August 22, 1942, Serial No. 455,766

In Great Britain June 24, 1941

1 Claim. (Cl. 281—17)

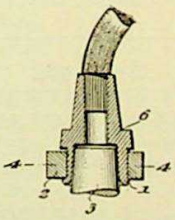
A combined diary and note-book comprising a backing sheet having a back section, said backing sheet being folded upon itself at opposite ends of said back section to form binding folds and front flaps, a pile of sheets of note paper having one marginal edge inserted in one binding fold and a pile of diary paper having its opposite marginal edge inserted in the other binding fold, and snap fasteners securing each of said piles in the appropriate fold inwardly from the marginal edges

of said piles, one of said front flaps being relatively short and terminating adjacent the binding fold it forms so that it does not cover a large area of the sheets of paper secured in that binding fold, the other front flap being of a length sufficient to cover at least the major portion of



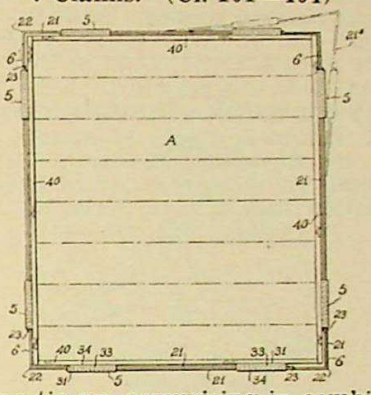
the sheets of paper secured in the binding fold which it forms so that it forms a front cover, the length of the piles of sheets of note paper and diary paper, respectively, relative to the distance between the binding folds, being such that said piles of note paper and diary paper overlap.

2,310,708
CLAMP
Horace U. Ransom and Leander G. Pynn, Meredith, N. H.
Application June 25, 1942, Serial No. 448,354
1 Claim. (Cl. 173—259)



In a clamp for a battery terminal, a first part having an elongated tube, one end of which has a small bore for receiving the end of an electric cable and the other end of which has a relatively large bore for receiving a battery terminal; the battery terminal receiving end having oppositely disposed longitudinally extending slots extending inwardly from the end thereof and forming two segments, the interior surfaces of said segments being smooth to fit the battery terminal, the exterior surfaces of said segments being in the form of cylinders whose axes are equidistant from and on opposite sides of the axis of the clamp; a second exterior part coaxial with said first part, substantially coextensive with said slots and having the form of a nut with wrench engaging exterior surfaces, said second part having interior surfaces complemental to and in engagement with the exterior surfaces of said first part, and the terminal receiving end of the first part being provided with an outwardly extending flanged portion to provide interengaging retaining means on said parts for holding the same in operative position; whereby rotation of said second part with respect to said first part will cause contraction of said segments to grip the battery terminal.

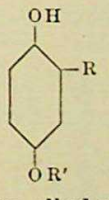
2,310,709
TYPE TIE-UP
John J. Riehl, Cleveland, Ohio
Application February 6, 1941, Serial No. 377,689
7 Claims. (Cl. 101—404)



1. A type tie-up, comprising in combination, a plurality of confining members co-active with each other, the said members being bent to form angles of less than 90° when unassociated with type and which form angles of 90° when associated with type, and a clamp means mounted on the assembled confining members forming thereby a rectangular frame.

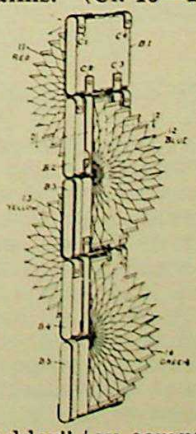
2,310,710
INHIBITOR FOR GASOLINE
Robert H. Rosenwald and Joseph A. Chenicek, Chicago, Ill., assignors to Universal Oil Products Company, Chicago, Ill., a corporation of Delaware
No Drawing. Application September 18, 1939, Serial No. 295,476
18 Claims. (Cl. 44—78)

1. A process for stabilizing olefin-containing hydrocarbon oils in regard to their desirable properties which comprises adding to said oils a minor portion of a compound having the general structure



wherein R and R' are alkyl groups.

2,310,711
MYSTERY TOY
Edward S. Savage, Rochester, N. Y.
Application October 14, 1942, Serial No. 461,935
6 Claims. (Cl. 46—1)



1. A "Jacob's ladder" toy comprising tumbling

blocks, flexible bands connecting said blocks to support the same, one above the other in end to end alinement, and an expansible and contractable display member attached to adjacent faces of two adjacent blocks and serving as a supplementary connection between them.

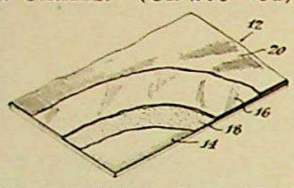
2,310,712

ASPHALT OR RESIN SHIPPING CONTAINER

Orville K. Schmied, Upper Montclair, N. J., assignor to Reynolds Research Corporation, Richmond, Va., a corporation of Delaware

Application June 8, 1940, Serial No. 339,416

2 Claims. (Cl. 206—84)



1. A shipping container for a block of asphalt, or the like, which container includes an outer casing, an inner lining of foil, a continuous strippable plastic film on said foil, said foil adhesively secured to said casing by a bond of substantial strength, said film adhered to said foil by a bond of less strength and said film adhering to said block of material more strongly than the adhesion to said foil whereby upon removal of said block, the film clings to the surface of the material and is removed in its entirety from the surface of the foil.

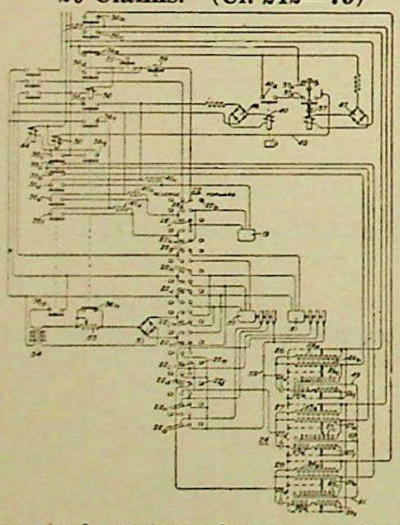
2,310,713

CONTROL SYSTEM

David R. Shoults and Albert P. Mansfield, Schenectady, N. Y., assignors to General Electric Company, a corporation of New York

Application December 17, 1940, Serial No. 370,490

20 Claims. (Cl. 242—75)



1. A control system for apparatus for unwinding material from a reel and winding the material on another reel comprising in combination, an unwinding reel, a winding reel, an induction machine having polyphase primary and secondary windings mechanically coupled to each of said reels, a polyphase resistance-reactance network connected in the secondary circuit of the winding reel machine to control said machine to operate as a motor at constant power output throughout a substantial speed range to drive the winding reel, and means for controlling said unwinding reel machine to operate as a generator driven by said unwinding reel at constant power output thereby to maintain the tension of said material substantially constant.

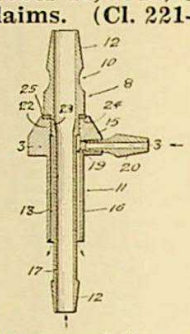
2,310,714

GOOSENECK FOR CONTAINERS

George H. Slaughter, Benton Harbor, Mich.

Application October 11, 1941, Serial No. 414,619

4 Claims. (Cl. 221—74)



1. A gooseneck for containers, comprising a tubular member arranged at each end for connection with a flexible tube, one tube adapted to extend down into the container and the other one leading away from the other end of the tubular member, a sleeve member surrounding the tubular member with the latter projecting beyond both of its ends and having a head at its upper end and a sleeve therebelow, the tubular member and sleeve member being threadedly secured together, and there being an annular passageway between the tubular member and sleeve member extending down from a point within the head, and there being a duct in said head leading outward from said passageway, a nipple secured in the head in communication with said duct and adapted for connection with a flexible tube which is adapted to be connected to a pump, and sealing means between the sleeve member and container.

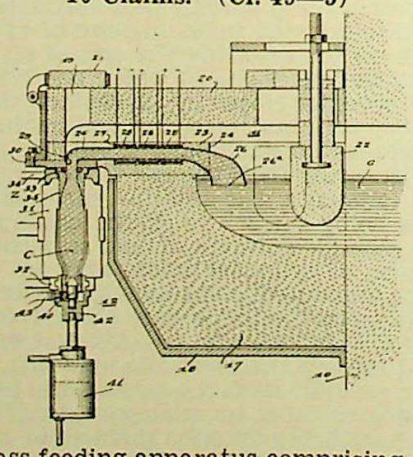
2,310,715

METHOD OF AND APPARATUS FOR FEEDING GLASS

Leonard D. Soubier, Toledo, Ohio, assignor to Owens-Illinois Glass Company, a corporation of Ohio

Application May 4, 1940, Serial No. 333,347

10 Claims. (Cl. 49—5)



5. Glass feeding apparatus comprising, in combination, an enclosed forehearth to contain molten glass, a horizontally disposed conduit having downturned ends, one of said ends having an outlet opening at one side of the body of glass in the forehearth and above the normal level of the glass in the forehearth, the other end of said conduit extending into the glass

within the forehearth, an inverted suction gathering mold movable into a position in which the mold cavity is in communication with said opening and forms a continuation of said conduit, means for exhausting air from the mold and thereby establishing a subatmospheric pressure which induces a flow of glass through the conduit into the mold, and means for severing a charge of glass in the mold from the glass in the conduit at a level above that of the glass in the forehearth and thereby causing a back-flow of glass in the conduit.

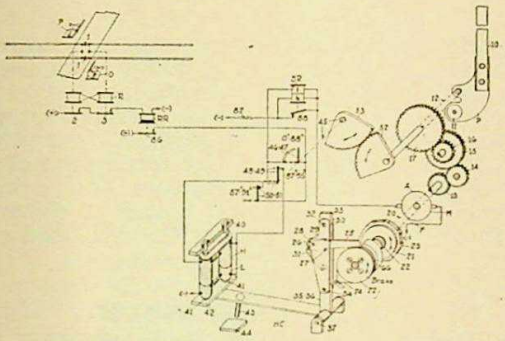
2,310,716

HIGHWAY CROSSING GATE

James E. Stephenson, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y.

Application December 20, 1938, Serial No. 246,859

4 Claims. (Cl. 39—7)



1. In an electric motor operated crossing gate, in combination, a gate fastened to a horizontal shaft and partly counterbalanced so that the shaft is biased to a horizontal stop position but is very strongly biased to a clear position if the gate be broken off, a gear train, an electric motor for operating said shaft to a clear position through the medium of said gear train, a clutch wheel frictionally connected to the shaft of said motor; a hold-clear magnet having a high resistance coil and a low resistance coil and which, if in an active condition, locks said clutch wheel; a control relay; a first contact, a second contact and a third contact controlled by said shaft the first of which contacts opens when said shaft on moving in one direction assumes a predetermined position, the second and third of which contacts close just before said shaft, on moving in said one direction, has reached said predetermined position; an operating circuit for said motor including a contact of said control relay, a source of current and said first contact; a circuit for said low resistance coil including, in series, said source, a contact of said control relay, and said first and second contacts in series; a circuit for said high resistance coil and said low resistance coil in series including a contact of said control relay, said source and said third contact; a snubbing circuit for said motor including in series said motor and a snubbing resistance; and a centrifugal brake for said motor effective if said motor be rotated above a predetermined speed to brake the motor.

2,310,717

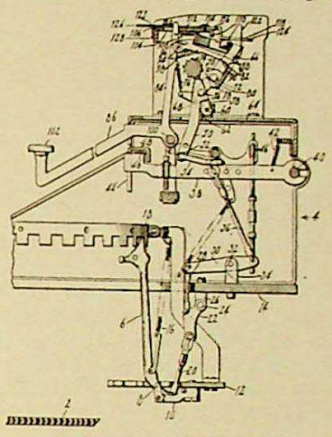
TYPEWRITING MACHINE

Oscar J. Sundstrand, West Hartford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a corporation of Delaware

Application December 31, 1940, Serial No. 372,633

7 Claims. (Cl. 197—17)

1. A typewriting machine comprising a rotary toothed driving member, a longitudinally upwardly and downwardly movable driving thrust link, a pawl carried by said driving link for engaging said rotary toothed member, a type bar, a connection between the driving link and the type bar for actuating the type bar, a key lever having a key movable from normal to depressed position and an upwardly extending arm, a drag link connected with said arm to move the driving link laterally to engage the pawl with the



rotary member, a repeat device for engaging the rear end of the driving link upon the return movement of the link to move the driving link laterally to engage the pawl with the rotary member and a connection between the repeat device and the upwardly extending arm of the key lever for moving the repeat device into and out of position to be engaged by the driving link respectively upon depression and release of said key.

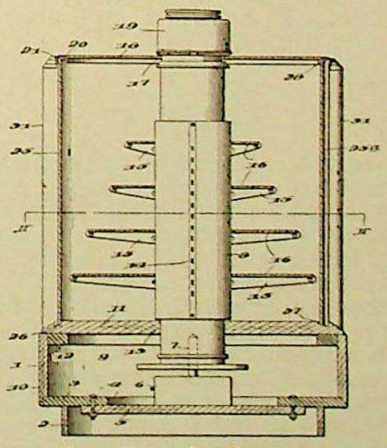
2,310,718

DISPLAY CASE

Max K. Teach, Columbus, Ohio, assignor to The Columbus Show Case Company, Columbus, Ohio

Application January 15, 1940, Serial No. 313,999

2 Claims. (Cl. 240—6)



1. A merchandise display case comprising a base, a circular top, a vertically disposed cylindrical transparent wall structure arranged between said base and top, a plurality of circumferentially spaced, vertically extending, light housing columns disposed exteriorly of and immediately adjacent to said wall structure, said columns being united at their ends with said base and top and free from direct connection with said wall structure, each of said columns being internally hollow with one side thereof open toward the interior of said case, and light producing means disposed within said columns.

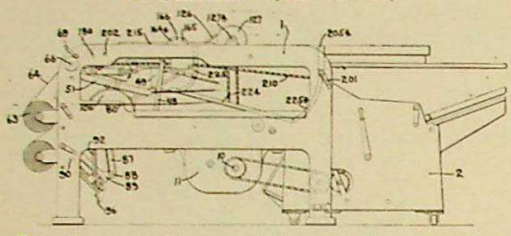
2,310,719

WRAPPING MACHINE

Howard B. Tuthill and Harry F. Caldwell, Grand Rapids, Mich., assignors, by mesne assignments, to Oliver Machinery Company, Grand Rapids, Mich., a limited partnership of Michigan

Application December 21, 1938, Serial No. 247,063

34 Claims. (Cl. 93—2)



1. In a wrapping machine having infeed and outfeed conveyors, elevator mechanism including an elevator casting pivotally mounted at one end, an elevator carriage pivotally secured at the other end of said casting, an upwardly extending track, and means on said carriage adapted to ride in said track, whereby said carriage will be in substantial alinement with the infeed conveyor in one position and with the outfeed conveyor in another position.

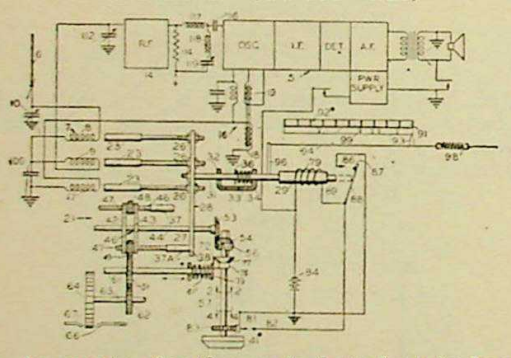
2,310,720

ANTENNA COUPLING AND TUNING SYSTEM FOR COMMUNICATION OR BROADCAST RECEIVERS

Clarence W. Wandrey, Chicago, Ill., assignor to Zenith Radio Corporation, a corporation of Illinois

Application April 21, 1941, Serial No. 389,650

48 Claims. (Cl. 192—142)



1. Apparatus for the control of electrical equipment comprising a movable controlling member, an electromagnet for moving said member in one direction, resilient means tending to move said member in the opposite direction, a stop assembly comprising spaced stops, means on said movable member for cooperation with said stop assembly, means to bring about cooperation of said stops with said member in a predetermined order, switch means, an electrical circuit including said switch means for energizing said electromagnet whereby to move said member upon operation of said switch means, and means for operating said switch means to effect control of said equipment.

2,310,721

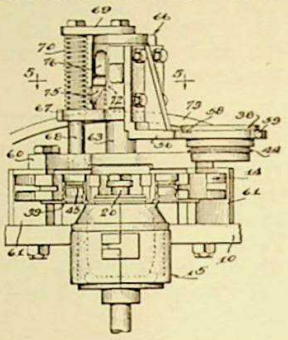
GLASSWARE FORMING MACHINE

Joseph W. Watt, Oakland, Calif., assignor to Owens-Illinois Pacific Coast Company, a corporation of Delaware

Application October 31, 1940, Serial No. 363,618

2 Claims. (Cl. 49—9)

2. In combination, a partible neck mold for a glassware forming machine of the press and blow type, mechanism for opening and closing said mold, said mold comprising coacting semi-circular halves adapted to form a portion of the neck finish of a container, a coacting secondary finish ring, a holder for said ring, a support for the holder including a sleeve journalled for vertical and swinging movement on a vertically disposed rod, a cage partially enclosing said sleeve and ar-



ranged for vertical movement only on said rod, a cam roller on said cage, a cam for engaging the roller for raising and lowering the cage, said sleeve having a vertically and spirally arranged slot, and a roller carried by said rod and extending through said slot whereby movement of said cage by the cam causes vertical and swinging movement of the sleeve and holder to move said ring into and out of registration with said mold.

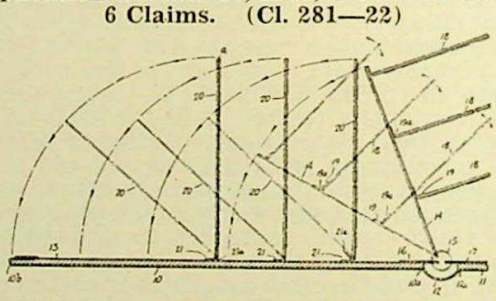
2,310,722

PHOTOGRAPH ALBUM

Irving Weinger, New York, N. Y., assignor to J. Widder & Co., New York, N. Y., a copartnership comprised of Samuel Widder and William Widder

Application October 10, 1942, Serial No. 461,614

6 Claims. (Cl. 281—22)



1. A book construction, including a flexible backbone and cover sections hinged thereto for relative movement, a plurality of sets of leaves of uniform width hingedly mounted within said shell, one set of leaves being hinged in the zone of said backbone, a second set of leaves being hinged to one of said cover sections in laterally spaced relation, and a third set of leaves hinged in laterally spaced relation to each of the leaves of said first set hinged in the zone of said backbone, the hinged axis of the leaves of the respective sets being arranged parallel to each other, the leaves of the respective sets of leaves being rotatable relative to their supporting surfaces for disposition in relative positions to expose predetermined portions thereof in proximate association.

2,310,723

ELECTRICAL COOKER

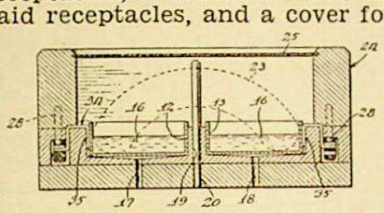
Ellwood F. Whitchurch, Chicago, Ill., assignor to The Griffith Laboratories, Inc., Chicago, Ill., a corporation of Illinois

Application August 31, 1938, Serial No. 227,617

3 Claims. (Cl. 219—19)

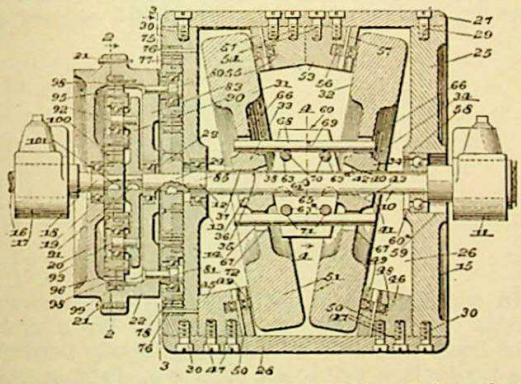
1. In an electrical cooker for frankfurters and

the like, a base of insulating material having spaced recesses therein, a pair of open-top receptacles removably supported in the recesses of said base for containing a current-conducting fluid, drains in said base communicating with said recesses, an electrical circuit, one side of which is connected to one of said receptacles and the other side of which is connected to the other of said receptacles, a switch in said circuit for each of said receptacles, and a cover for enclos-



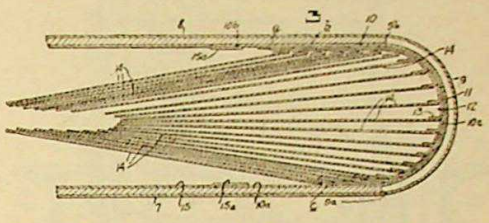
ing said receptacles, said cover being movably supported on said base and operating to close said switches when in a lowered position on said base and to break the circuit through said switches when raised above said base, and said receptacles being formed of a current-conducting material with co-operating walls thereof forming electrodes for contacting frankfurters bridged thereacross at opposed ends of the frankfurters beneath the surface of the current-conducting fluid in the receptacles.

2,310,724
AUTOMATIC TRANSMISSION
John B. Whitlow, Cincinnati, Ohio
Application July 19, 1941, Serial No. 403,225
8 Claims. (Cl. 74—259)



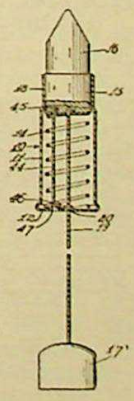
1. A transmission comprising a drive shaft, a driven shaft in alignment with the drive shaft, a casing mounted for independent rotation on the drive shaft and provided with a ring gear adjacent the inner end thereof, a fly-wheel having a hub portion provided with a rockable bearing on the drive shaft so that the wheel may rock to one side of a vertical plane transverse to the longitudinal axis of the drive shaft, means forming a driving connection between the wheel and drive shaft, a sun gear keyed to an intermediate portion of the drive shaft, a housing rotatable on the drive shaft adjacent the sun gear, a plurality of planetary gears rotatably carried by the outer face of the housing and meshing respectively with the ring and sun gears, a disk in the housing and keyed to the drive shaft, a sun gear in the housing and keyed to the driven shaft, a ring gear secured to and within the housing, planetary gears rotatably mounted on the disk and meshing with the said sun gear and second-mentioned ring gear, and means on the casing adapted to be engaged by the fly-wheel for causing rocking of the fly-wheel during differential speeds between fly-wheel and casing.

2,310,725
INDEX DIRECTORY
Samuel Widder and Irving Weinger, New York, N. Y., assignors to J. Widder & Co., New York, N. Y., a copartnership comprised of Samuel Widder and William Widder
Application October 10, 1942, Serial No. 461,616
5 Claims. (Cl. 281—15)



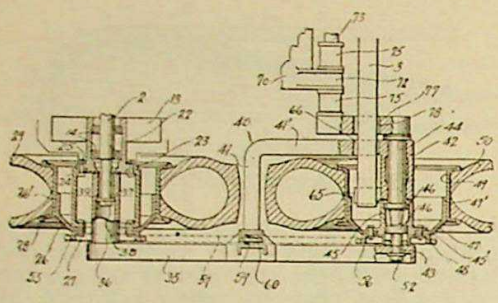
5. An index book embodying a shell comprising substantially rigid cover sections connected by a flexible backbone for relative hinged movement and a leaf unit, including a flexible leaf-supporting element, a series of leaves of uniform width and normally independent means for attaching the respective leaves to said supporting element for relative hinged movement about an axis parallel to the backbone, said leaf-supporting element being adhesively secured to the opposite cover sections of said shell in zones oppositely spaced from said backbone, to permit of free movement of that portion of said supporting element overlying said backbone relative thereto and in conformity with the movements of the backbone in the opening and closing of the book, said leaves being disposed in laterally spaced relationship across the backbone and the portions of the covers adjacent to said backbone and said leaf-hinging means functioning to dispose the leaves with their associated marginal portions in staggered relation, when the book is opened.

2,310,726
LIPSTICK DEVICE
James L. Younghusband, Chicago, Ill.
Application May 27, 1942, Serial No. 444,756
6 Claims. (Cl. 206—56)



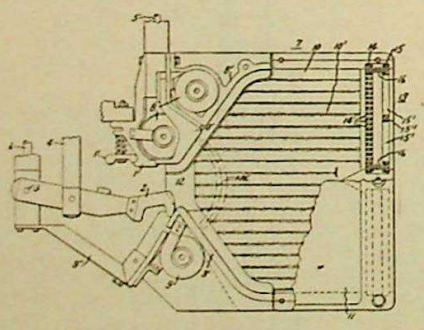
1. In a lipstick device having a case with side walls, a bottom and an open top, a holder slidable in said case and adapted to carry lipstick, a closure for the open top of said case, a spring in said case below said holder for moving the holder upwardly to project the lipstick above the open top for use, and a connector attached to said closure and said holder and adapted when said closure is moved to closed position on said open top to pull said holder and its lipstick within said case against said spring, and a secondary connector attached to said holder and engaging the bottom of said case, said connector of such length as to retain the holder in said case.

2,310,727
TRACTOR
George S. Allin, Seattle, Wash., assignor to Isaacson Iron Works, Seattle, Wash., a corporation of Washington
Application March 26, 1941, Serial No. 385,261
5 Claims. (Cl. 280—124)



1. In a tractor of the character described, a frame, a transverse supporting axle with an end portion extended to one side of the said frame, a driven ground wheel mounted to rotate about the extended end portion of said axle, a swing frame mounted by the extended end portion of said axle, and extended along the side of the tractor, at the outside of said ground wheel, a ground wheel mounted by the swing frame, a resilient support for the tractor frame acting against the swing frame for support thereby, and a stabilizing linkage for the swing frame hingedly affixed to the tractor frame and having a hinged mounting in the swing frame and adapted to retain the alinement of the swing frame with the tractor frame without hindrance to its oscillation.

2,310,728
ELECTRIC CIRCUIT BREAKER
Percy Bartlett, Springfield, Pa., assignor to General Electric Company, a corporation of New York
Application September 4, 1941, Serial No. 409,515
9 Claims. (Cl. 200—147)

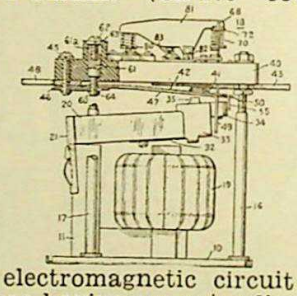


9. An electric circuit breaker comprising relatively movable contacts separable to form an interrupting gap, an arc chute, magnetic blowout means for driving the arc at said gap into said chute for extinguishing the arc, said arc chute having an exhaust opening for venting arc gases generated within said chute, and throttling means normally freely venting said chute at said exhaust opening, said throttling means being controlled in accordance with heavy current interruptions so as to restrict the venting area opposite the central or intermediate portion of the arc more than the venting area opposite the extremities of said arc.

2,310,729
PROCESS OF PRODUCING CELLULOSE DERIVATIVES
Rudolph S. Bley, Milligan College, Tenn., assignor to North American Rayon Corporation, New York, N. Y., a corporation of Delaware
No Drawing. Application January 5, 1942, Serial No. 425,629
13 Claims. (Cl. 260—214)

10. The process which comprises reacting a partially substituted cellulose with a substance selected from the group consisting of alkali metals and alkali metal amides in a medium comprising anhydrous, liquid ammonia, the amount of said substance employed being stoichiometrically equivalent to at least one unsubstituted hydroxyl group present in the partially substituted cellulose, until said substance has substantially completely reacted therewith, substantially removing excess ammonia from the reaction mixture, adding an esterifying agent in an amount at least equal to one equivalent thereof per atom of said substance, and allowing the reaction to proceed until the substance employed is substantially completely converted to the salt of the inorganic acid radical present in the esterifying agent and said substance.

2,310,730
CIRCUIT CONTROLLER
William Lawrence Butler, Schenectady, and George M. Hausler, Ballston Lake, N. Y., assignors to General Electric Company, a corporation of New York
Application June 18, 1941, Serial No. 398,608
8 Claims. (Cl. 175—336)



1. In an electromagnetic circuit controller, a magnetic core having an extending leg defining an end face, one side of said leg being provided with a projection adjacent said end face, a magnetic armature extending transversely of said leg in abutting relation thereto, and spring means fastened to said armature and engaging said leg on one side of said projection, said means extending longitudinally of said leg resiliently to engage the other side of said projection thereby to connect said armature to said leg and to bias said armature for pivotal movement about said one side of said leg away from said end face.

2,310,731
INTERPOLYMERS OF DIALLYL ITACONATE AND ETHYL METHACRYLATE
Gaetano F. D'Alelio, Pittsfield, Mass., assignor to General Electric Company, a corporation of New York
No Drawing. Application October 31, 1939, Serial No. 302,169
4 Claims. (Cl. 260—78)

2. The method of producing new synthetic compositions which comprises forming a mixture of copolymerizable materials consisting of diallyl itaconate and ethyl methacrylate, said diallyl itaconate constituting from 0.5 to 20 per cent by

weight of the said mixture, and heating the said mixture while admixed with a small amount of a polymerization catalyst until a solid copolymer of the said components has been formed.

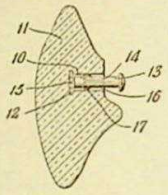
2,310,732

ALLOY AND DENTAL ARTICLE

Charles Dietz, York, Pa., assignor to The Dentists' Supply Company of New York, New York, N. Y., a corporation of New York

Application November 24, 1941, Serial No. 420,227

9 Claims. (Cl. 75—172)



1. An alloy comprising metal from the group consisting of 60 to 85 parts of palladium with to 85 parts of palladium with 10 to 35 parts of palladium with 10 to 35 parts of gold, and 60 to 85 parts of palladium with 10 to 35 parts of platinum and gold, alloyed with from 2 to 10 parts of silver, said alloy being characterized by high resistance to discoloration and excessive blistering at high temperatures.

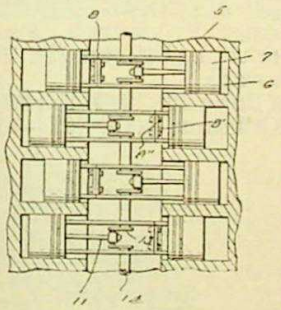
2,310,733

INTERNAL COMBUSTION ENGINE

Charles Austin Duke, San Antonio, Tex.

Application March 25, 1942, Serial No. 436,206

1 Claim. (Cl. 123—56)



An internal combustion engine comprising opposed cylinders, pistons working in the cylinders, lugs in the pistons, rigid rods projecting from the lugs, plates on the ends of the rods, and disposed in abutting relation, and bolts connecting the plates.

2,310,734

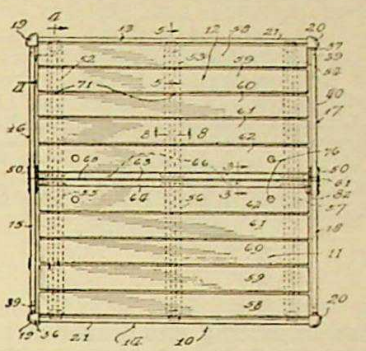
FLOOR CONSTRUCTION

Abraham G. Feldman, Chicago, Ill., assignor to Storkline Furniture Corporation, Chicago, Ill., a corporation of Illinois

Application May 22, 1940, Serial No. 336,560

1 Claim. (Cl. 20—8)

In a floor construction for play pens for infants, the combination of a plurality of transverse frame members, said frame members being provided with a large body section engaging below floor boards and with an upwardly extending dove-tailed formation of substantially uniform cross section throughout its length and a plurality of floor boards, said floor boards being provided with complementary dove-tailed shaped grooves on their lower sides for slidably receiving and frictionally holding the dove-tailed formations on said frame members, the floor boards being assembled with the frame members and held in predetermined position with respect to each other by frictional fit of said grooves and formations, said floor also hav-



ing an end rail provided with sockets, and said frame members being provided with reduced end portions for fixed reception in said sockets whereby the end rail is secured to said frame members.

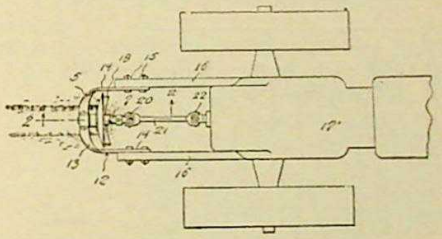
2,310,735

EXCAVATOR

Jesse O. Greer, Robert Lee, Tex.

Application March 17, 1942, Serial No. 435,101

3 Claims. (Cl. 37—92)



1. In an excavator, a concave rotatable earth cutting disc having its periphery shaped to provide an annular cutting edge, means for mounting said disc for rotation at the rear end of a power driven means and at an angle to the line of draft of said power means, means for rotating said disc by power from said power means, and radially extending arcuately curved blades rotatable with the disc and contacting the concave face thereof and terminating short of the cutting edge for throwing earth from said disc as cut thereby.

2,310,736

DOUBLE SCREEN STRUCTURE

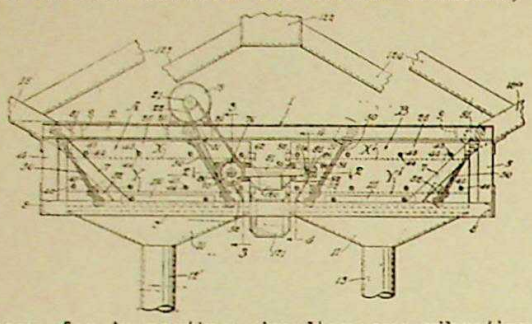
Oscar C. Gruender, Milwaukee, Wis., assignor to Nordberg Manufacturing Co., Milwaukee, Wis., a corporation of Wisconsin

Original application June 11, 1938, Serial No. 213,193. Divided and this application July 15, 1940, Serial No. 345,598

8 Claims. (Cl. 209—240)

6. In a vibrating screen structure, a base, a plurality of screen elements independently mounted upon said base and located generally end to end, with their discharge ends opposite to each other, unitary means for imparting simultaneously to said elements a screening and conveying vibration, unitary means for feeding material simultaneously from a single source to the feed ends of said screen elements, means located between the opposed ends of the screen elements for receiving simultaneously the discharge from said screen elements, including a

plurality of superposed conveyors extending in a direction generally at right angles to the path of movement of the material across the screen elements and lying in a common vertical plane, and located between the screen elements, the



means for imparting simultaneous vibration to the screen elements including a rotary member mounted on one of said elements, and means for rotating it, and an actuating connection between said rotary member and the other of said elements.

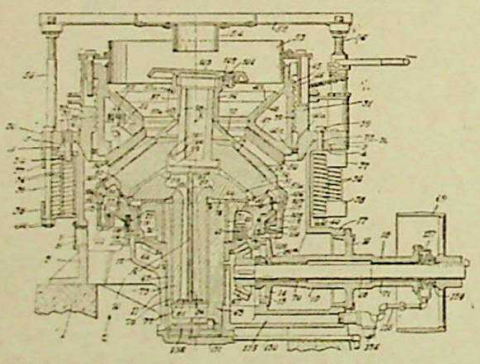
2,310,737

SHAFTLESS CONE CRUSHER AND TILTING MEMBER THEREFOR

Oscar C. Gruender, Milwaukee, Wis., assignor to Nordberg Manufacturing Company, Milwaukee, Wis., a corporation of Wisconsin

Application July 26, 1940, Serial No. 347,698

16 Claims. (Cl. 83—10)



1. For use in a gyratory crusher having a normally fixed bowl, a crushing head including a generally conic body portion having a crushing face of an angle higher than the angle of repose of the material delivered thereto, said body portion being penetrated upwardly from below by an aperture of substantial depth in relation to its transverse diameter, said aperture being defined by a downwardly concave generally spherical surface, and actuating means for said head including a tilting member and means for gyrating it, said tilting member having a tilting head with an upwardly convex spherical surface conforming to the spherical surface in the bottom of the head, said head having a downwardly convex spherical bearing surface adjacent the lower outer edge thereof, the center of said surface being located above the top of the crushing portion of the head, and a normally fixed support for said head including an upwardly concave spherical bearing element adapted to receive and conform to said downwardly convex spherical bearing surface of the crushing head.

2,310,738

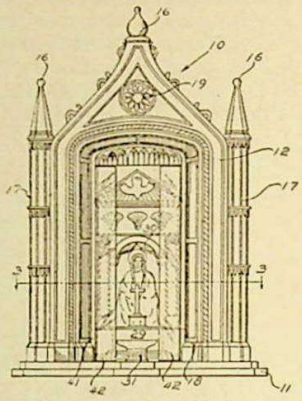
EDUCATIONAL AND DISPLAY DEVICE

Charles O. Johnston, Wilmington, Del.

Application April 8, 1941, Serial No. 387,489

4 Claims. (Cl. 35—23)

1. A religious teaching aid comprising a miniature church including a removable back, ornamental sides and an ornamental front having a door opening adapted to frame a portion of the interior of said church, an altar within said church and framed by said doorway, a plaque formed on the interior surface of the back and framed by said doorway, a source of light surrounding said doorway and concealed from view



by the adjacent area of said front, a glass panel disposed against the inner marginal face of said doorway and providing a pair of partially opened transparent doors and extending from side to side of said church and overlying said source of light, said portion of said glass panel overlying said source of light being frosted to diffuse the rays of light from said source and prevent glare or high lights in the interior of said church.

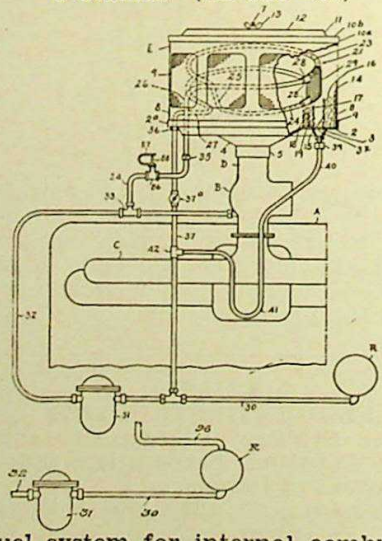
2,310,739

FUEL SUPPLY AND CARBURETING SYSTEM FOR INTERNAL COMBUSTION ENGINES

Joseph C. Lang, Pittsburgh, Pa., assignor to Bocjl Corporation, Pittsburgh, Pa., a corporation of Delaware

Application June 27, 1940, Serial No. 342,742

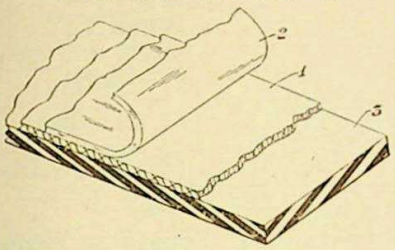
6 Claims. (Cl. 261—21)



1. A fuel system for internal combustion engines comprising a carburetor having an inlet for engine combustion air, a contact device communicating with said air inlet, a fuel pump having an intake connection from a source of fuel and delivery means for feeding fuel to said carburetor and said contact device simultaneously, said contact device having a tubular loop with one end connected to said delivery means and its other end leading to a point in said system on the intake side of said pump, said loop having an intermediate perforated portion communicating

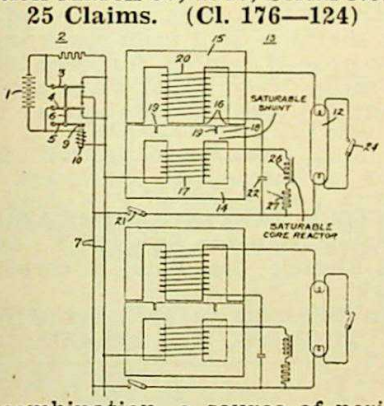
with said air inlet for delivering fuel for admixture with the engine combustion air ahead of said carburetor, and means associated with said perforated portion to establish intimate contact between said fuel and said combustion air.

2,310,740
ADHESIVE TAPE
Joseph B. Leavy, Newburgh, N. Y., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a corporation of Delaware
Application January 29, 1942, Serial No. 428,741
3 Claims. (Cl. 250—81)



1. An article of manufacture comprising a sheet material having a base coating on one side comprising a cellulose ether binder and from 50 to 80 per cent thereof of a luminous material, a clear unpigmented cellulose ether coating superposed over said base coating, and a pressure-sensitive adhesive coating on the opposite side.

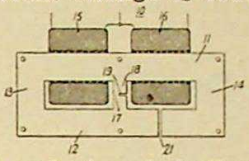
2,310,741
ELECTRIC TRANSLATING APPARATUS
Harold W. Lord, Schenectady, N. Y., assignor to General Electric Company, a corporation of New York
Application March 30, 1940, Serial No. 327,072
25 Claims. (Cl. 176—124)



24. In combination, a source of periodic voltage, an electric discharge device, electric translating apparatus interconnecting said source and said device comprising transformer means including a primary winding and a secondary winding, a condenser electrically connected with one of said windings for tuning the circuit of the primary winding to substantially the frequency of said periodic voltage, and a stabilizing circuit connected across said condenser for maintaining the tuning of said primary circuit substantially independent of the operation of said discharge device.

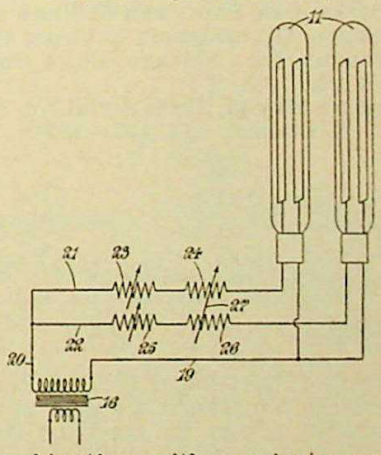
2,310,742
TRANSFORMER
Harold W. Lord, Schenectady, N. Y., assignor to General Electric Company, a corporation of New York
Application July 19, 1940, Serial No. 346,343
2 Claims. (Cl. 171—119)

1. A transformer device for supplying an alternating current potential to a load from a source of periodic voltage, said device comprising a primary and a secondary winding, a core structure for said windings including a magnetic shunt extending between said windings and having a saturable portion in a closed magnetic circuit for said primary winding and designed to saturate for a substantial portion of each half-cycle of said supply, said magnetic shunt having a non-magnetic gap in parallel arrangement with respect to said saturable portion whereby the rate of primary current change is reduced near the



beginning and end of each half-cycle, said gap and said saturable portion having a length such that said shunt provides for substantial leakage between said primary and said secondary windings during the portion of each half-cycle that said saturable portion is saturated thereby to provide ballast impedance in the circuit of said secondary winding and a non-magnetic gap in the local magnetic circuit for said secondary winding to reduce the impedance thereof.

2,310,743
ELECTRIC LIGHTING APPARATUS
Eric Beecroft Moss, London, England, assignor to S. Smith & Sons (Motor Accessories) Limited, Cricklewood, London, England, a British company
Application January 7, 1942, Serial No. 425,944
In Great Britain November 19, 1940
1 Claim. (Cl. 176—124)

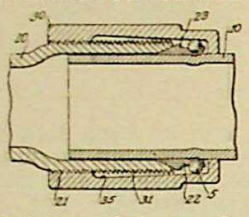


The combination with an instrument panel having its instruments treated with a material which fluoresces under the action of ultra-violet rays of a plurality of ultra-violet ray discharge lamps adapted to illuminate said instruments, filters associated with said lights and adapted to prevent emanation of visible light, a common source of current for said lamps, manually adjustable means for regulating the voltage applied to each lamp for compensating and equalizing the different voltage characteristics of the discharge lamps, an adjustable impedance in series with each lamp and means for simultaneously adjusting said series of impedances to simultaneously vary the light from each to the same degree.

2,310,744
PIPE JOINT
Alden E. Osborn, Mount Vernon, N. Y.
Application April 23, 1941, Serial No. 389,869
5 Claims. (Cl. 285—97.3)

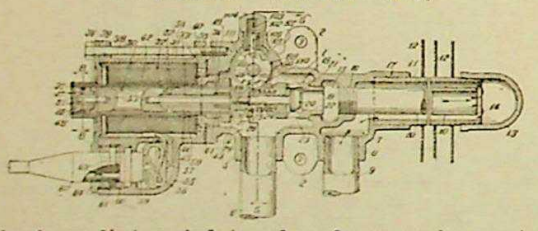
1. A means for joining an open-ended member

and a member having a cylindrical portion adapted to enter said open-ended member, comprising a relatively thin sleeve around said cylindrical portion of said second-mentioned member, a collar having an internal tapered surface, balls within said collar and arranged to bear upon said tapered surface therein and the exterior of said relatively thin sleeve, and co-acting threads on said open-ended member and said collar whereby, when said collar is rotated to move same longitudinally by the action of said threads, said balls are rotated and moved around



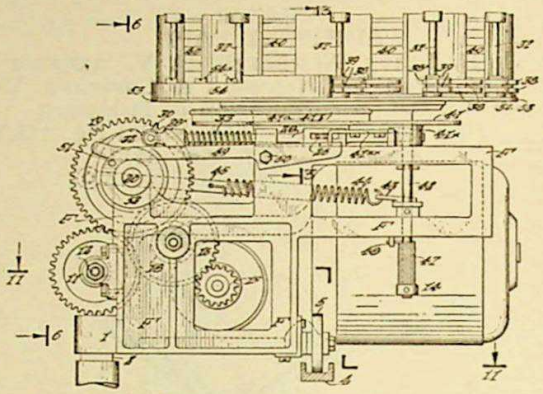
and along said internal tapered surface to the smaller diameter part thereof and are also rotated against said relatively thin sleeve to contract said balls about said sleeve and reduce the circumference thereof at the point of contact of said balls and to press said sleeve into forcible contact with said cylindrical portion of said second-mentioned member to thereby hold said open-ended member and said second-mentioned member together and to render the joint between said open-ended member and said second-mentioned member tight against leakage.

2,310,745
SOLENOID INLET VALVE
Paul B. Parks, Oak Park, and William R. Peterson, Chicago, Ill., assignors to Vapor Car Heating Company, Inc., Chicago, Ill., a corporation of New York
Application May 17, 1940, Serial No. 335,719
13 Claims. (Cl. 137—139)



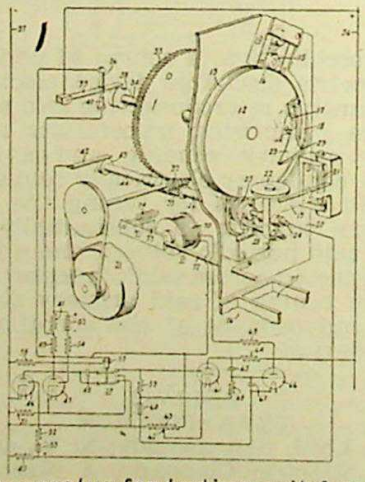
1. A radiator inlet-valve for use in a steam heating system comprising a casing enclosing a steam chamber, a port for receiving steam and leading it into the chamber, an outlet port for delivering steam from the chamber, a movable assembly within the chamber comprising a valve member adapted to close the outlet port, a spring for normally moving the assembly in a direction to open the valve, electrically actuated means for moving the assembly in the opposite direction, in opposition to the spring, to close the valve, a projection extending laterally from a portion of the moveable assembly, a manually operable member movable adjacent the movable assembly and formed with a recess receiving the projection and permitting free movement of the valve by the electrically actuated means from open to closed position, said manually operable member being movable to engage said projection and shift the movable assembly to close the valve, and movable in the opposite direction to prevent closing movement of the valve, and means for yieldably locking the manually operable member in positions to hold the valve either open or closed or to permit movement of the valve by the electrically actuated means.

2,310,746
TARGET THROWING APPARATUS
Laurie F. Parker, Noroton, Conn., and Arnold Hanger, Richmond, Ky.
Application October 20, 1941, Serial No. 415,786
10 Claims. (Cl. 124—8)



1. A target throwing apparatus comprising a rotary carrier having in annular arrangement a plurality of holders for stacks of targets, the carrier being apertured at the base of each stack holder, means for imparting rotary movement to the carrier step by step with a dwell intermediate each two steps, a throwing arm adapted to receive a lowermost target from one of the stacks at each dwell interval of the stack carrier, a spring attached to the throwing arm and means for placing the spring under tension prior to each dwell of the stack carrier, latching and latch-releasing means for the throwing arm, and means for returning the throwing arm to latching position following an active movement of the throwing arm, in combination with target holding and releasing means for the targets of each stack, comprising two spring-pressed latches for each stack, and means for successively releasing and applying said latches during a partial rotation of the stack carrier.

2,310,747
SWITCH TESTING APPARATUS
John H. Payne, Ballston Spa., N. Y., assignor to General Electric Company, a corporation of New York
Application November 10, 1939, Serial No. 303,847
11 Claims. (Cl. 209—81)



11. In apparatus for testing switches, the combination which includes a testing station, means to deliver switches individually and periodically to said testing station, means at said testing station for repeatedly operating each switch to open and closed position to produce a succession of

transient arcs in said switch, means for storing electric energy at a predetermined rate during and throughout the existence of each of said arcs, the total energy storage being a function of the quality of the gaseous content of the switch, and means responsive to such total energy storage during the complete succession of arcs for automatically classifying said switch in accordance with the quality of its gaseous content.

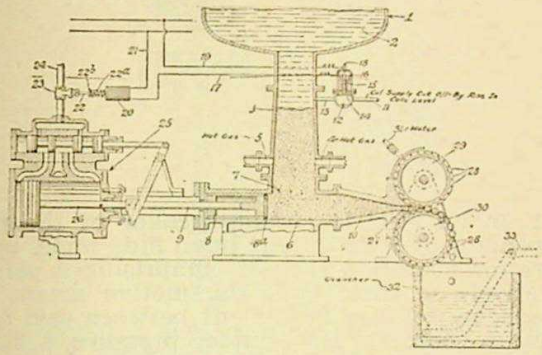
2,310,748

PROCESS AND APPARATUS FOR REMOVING COKE FROM STILLS

Paul W. Pearson, Chicago, Ill.

Application April 1, 1940, Serial No. 327,134

3 Claims. (Cl. 202—36)



2. A process of removing coke from a still in which oil is coked, comprising injecting oil into said still above the coke being formed, forcibly ejecting said coke upon the rise in level of the coke in the still, said rise in level being utilized to increase the pressure of injected oil, said increase in pressure being utilized to bring the ejection of coke into operation.

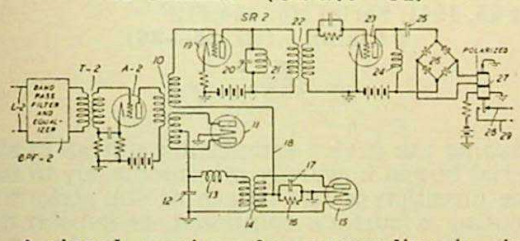
2,310,749

SIGNALING SYSTEM

Ralph E. Ressler, Morristown, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York

Application March 31, 1942, Serial No. 436,979

21 Claims. (Cl. 179—84)



1. A signal receiver for responding to signals consisting of frequency modulated signaling current of constant amplitude without responding to amplitude modulated current of like frequencies, said receiver comprising a frequency detector, a signal relay operatively controlled by said detector in response to said signals, and means including an amplitude detector for blocking the operation of said frequency detector to prevent operation of said relay responsive to current varying in amplitude.

2,310,750

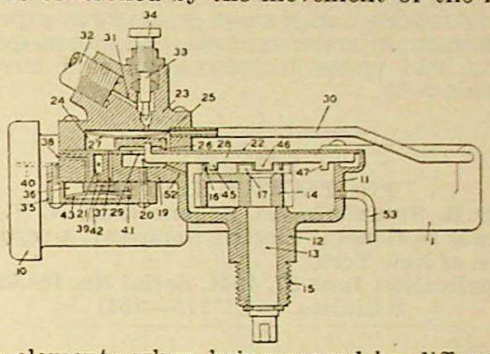
WINDSHIELD WIPER MOTOR

Steve Schnell, Overland, Mo., assignor to Wagner Electric Corporation, St. Louis, Mo., a corporation of Delaware

Application March 24, 1941, Serial No. 384,831

11 Claims. (Cl. 121—164)

1. In a fluid motor, two chambers of different cross-sectional area, movable elements in said chambers and connected together for simultaneous movement, a source of pressure different from atmosphere, means for causing fluid pressure from the source to be constantly effective in the smaller of said chambers, means including valve means controlled by the movement of the mov-



able elements when being moved by differential pressure for alternately placing the larger of said chambers in communication with the source and with the atmosphere, and other valve means operable independently of the first valve means and notwithstanding the condition thereof to cause differential pressure to position the movable elements at one end of their stroke.

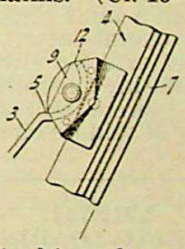
2,310,751

WINDSHIELD WIPER

Anthony C. Scinta, Buffalo, N. Y., assignor to Trico Products Corporation, Buffalo, N. Y.

Application May 27, 1940, Serial No. 337,351

5 Claims. (Cl. 15—250)



1. An arm attaching clip consisting of a pair of sections having abutting mating faces with parts straddling the back of a wiping body and forming a seat therefor, said faces having registering channels defining a tunnel to receive the free end of an actuating arm, and a fastener connecting the two sections together at a point immediately adjacent one transverse wall of the tunnel, the fastener having terminal parts overlying the outer faces of the two sections under a clamping pressure at points on opposite sides of the tunnel and in the plane of the aforesaid transverse wall of the tunnel to receive support from the latter whereby the two sections are backed by the terminal parts in direct opposition to any stress placed upon the sections by an attached arm tending to separate the sections.

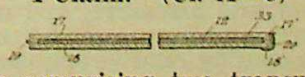
2,310,752

PALETTE

William A. Sillman and Ilon M. Sillman, New York, N. Y.

Application September 16, 1940, Serial No. 357,058

1 Claim. (Cl. 41—5)



A palette comprising two transparent plates made of substantially non-absorbent organic plastic material, and a flat non-transparent mem-

ber having a uniform color to simulate the color of an artist's canvas and positioned therebetween, the color of said member being visible through either transparent member and lending its color thereto whereby the non-transparent member is related to said canvas and the effect of pigments mixed on the surface of the transparent member are determined with respect to their expected effect upon an artist's canvas, and means for securing said plates together with said member therebetween.

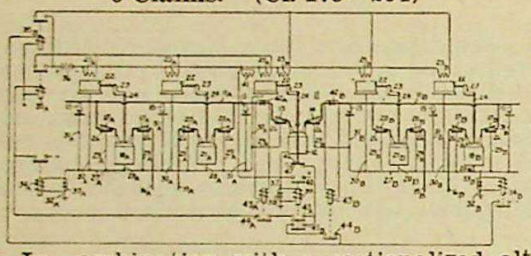
2,310,753

PROTECTIVE SYSTEM

Harry R. Summerhayes, Schenectady, N. Y., assignor to General Electric Company, a corporation of New York

Application June 27, 1941, Serial No. 400,022

6 Claims. (Cl. 175—294)



1. In combination with a sectionalized alternating-current system including tie circuit-interrupting means for interconnecting adjacent sections of said system, each of said sections being provided with a feeder circuit and a source of power connected thereto, means for isolating a section of said system upon the occurrence of a fault thereon, and a fault responsive protective system for said tie circuit-interrupting means for causing opening of said tie circuit-interrupting means and for initiating the isolation of only the section adjacent thereto still affected by said fault after opening of said tie circuit-interrupting means.

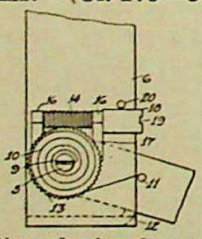
2,310,754

ADJUSTABLE SPRING LOADING DEVICE FOR RELAY ARMATURES

Tellef A. Terjesen, Hoboken, N. J., assignor to Signal Engineering & Manufacturing Company, New York, N. Y., a corporation of Massachusetts

Application May 7, 1940, Serial No. 333,876

2 Claims. (Cl. 175—345)



2. A spring loading device for relay armatures, comprising in combination a stationary frame supporting a pivot on which an armature is freely mounted, with said pivot providing a portion extending on the opposite side of said frame with respect to said armature, a stop carried by said frame adjacent the extended portion of said pivot, a coil spring surrounding the extended portion of said pivot and connected at its ends to said pivot and said armature, and means comprising a worm and gear assembly mounted on said pivot for causing relative angular movement between said pivot and armature, with the tension of said spring serving to maintain the worm against said stop to prevent turning of said pivot on its axis, and with said assembly being yieldable away from the stop to permit turning of said worm and gear and adjustment of the pressure exerted by the spring on said armature.

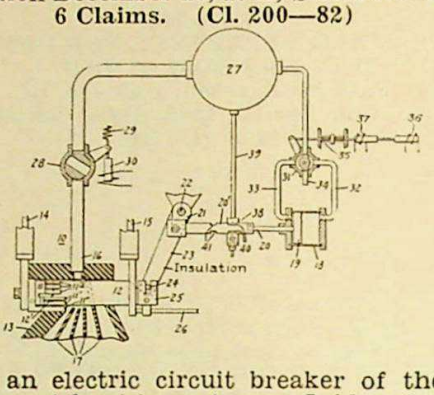
2,310,755

ELECTRIC CIRCUIT BREAKER

Carl Thumim, Yeadon, Pa., assignor to General Electric Company, a corporation of New York

Application December 10, 1941, Serial No. 422,387

6 Claims. (Cl. 200—82)



1. In an electric circuit breaker of the type depending at least in part upon fluid under pressure for operation thereof comprising a pair of relatively movable contacts, motive means for producing relative movement between said contacts, a source of fluid under pressure, a member associated with said motive means and movable thereby, and mechanical locking means responsive to the pressure of said source for locking said member in a predetermined position and consequently preventing operation of said circuit breaker when the pressure of said source falls to a value below which safe operation of said circuit breaker might not be obtained.

2,310,756

FASTENING MEANS

George A. Tinnerman, Cleveland, Ohio, assignor to Tinnerman Products, Inc., Cleveland, Ohio, a corporation of Ohio

Original application April 15, 1941, Serial No. 388,706. Divided and this application November 25, 1941, Serial No. 420,415

1 Claim. (Cl. 85—36)

A spring nut device comprising a strap of sheet material bowed upwardly intermediately to curve in the direction of the length of the strap while presenting a surface composed of substantially straight lines in a direction transverse of the strap, to provide a cylindrically curved surface which merges by reverse curvatures with flat bearing portions of the strap at opposite ends of the curved surface, the crown of the curved portion being apertured and provided with a pair of opposed tongues extending in the general direction of the length of the strap and inclined upwardly from the crown region to engage a stud occupying the aperture.

2,310,757

MEANS OF PREVENTING PITTING OF WELL PUMPS

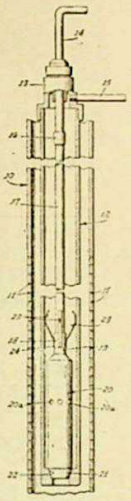
Edmond M. Wagner, Southgate, Calif., assignor to Roko Corporation, Reno, Nev., a corporation of Nevada

Application May 12, 1941, Serial No. 393,028

8 Claims. (Cl. 103—1)

1. In a well pumping device, the combination

of: an outer tubing extending downwardly in a well; a fluid operated pump in said outer tubing near the lower end thereof and having a substantial area thereof spaced from the inner wall of said tubing so that an electric current in said pump would normally pass from said pump across said space to said outer tubing so as to cause pitting of said pump; an inner tubing extending downwardly through said outer tubing



and connected to said pump so as to supply operating fluid thereto, said inner tubing being adapted to carry an electric current to said pump; and means for grounding the upper end of said pump to said outer tubing so as to prevent said electric current from passing across said space, said means including a plurality of metallic fingers associated with said pump and adapted to engage the inner wall of said outer tubing.

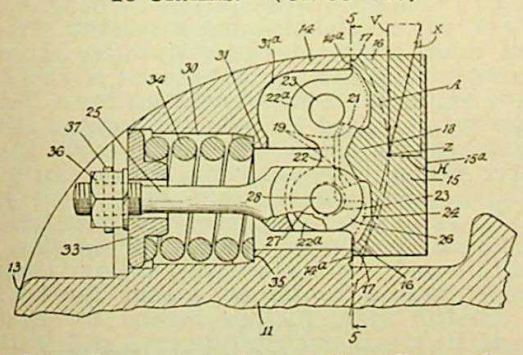
2,310,758

IMPACT MEMBER FOR IMPACT CRUSHERS

Ewald Werner and Karl Steinhart, Milwaukee, Wis., assignors to Nordberg Manufacturing Co., Milwaukee, Wis., a corporation of Wisconsin

Application July 15, 1940, Serial No. 345,570

18 Claims. (Cl. 83—46)



1. In an impact crusher, an impeller and means for rotating it, and an impact plate reversibly mounted on said impeller and means for holding said impact plate against the major centrifugal thrust, including a rearwardly extending flange located midway between the upper and lower edges of the plate, said flange having undercut bearing surfaces at top and bottom thereof, said impeller having an aperture adapted to receive said flange, said aperture having a mating undercut surface adapted to engage either of the undercut bearing surfaces of the flange, and additional means for drawing the inner edge of the plate against said impeller, said aperture having a minimum radial width sufficiently greater than the maximum radial width of said flange to permit the ready insertion of said flange directly into said aperture.

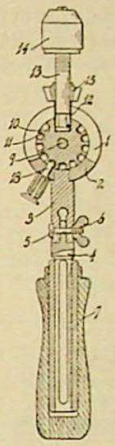
2,310,759

DRILL WITH ADJUSTABLE HEAD

Ira C. Clawson, Los Angeles, Calif.

Application January 6, 1940, Serial No. 312,724

3 Claims. (Cl. 77—7)



1. An adjustable drill comprising a hub, a handle stud fixedly mounted on the periphery of the hub, the outer face of the hub having a plain surface, a handle grip adjustably mounted on the outer end of the handle stud, said adjustment being angular to the handle stud, means slidably mounting the handle grip whereby the handle may be elongated, a shaft projecting from the hub, a disk journaled on the shaft, a sleeve mounted in the disk, a chuck shaft journaled in the sleeve, a pinion mounted on the chuck shaft, a driving gear journaled on the shaft and meshing with the pinion gear, said disk having a plurality of holes in the periphery thereof, and a spring pressed detent mounted on the hub adjacent the handle and adapted to extend into any one of said holes to hold the disk in adjusted position.

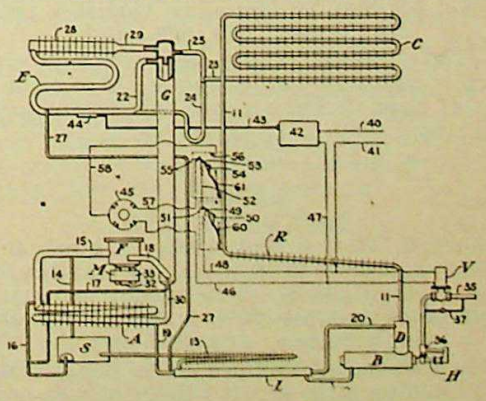
2,310,760

REFRIGERATION

Curtis C. Coons and Clarence G. Puchy, North Canton, Ohio, assignors to The Hoover Company, North Canton, Ohio

Application February 5, 1940, Serial No. 317,384

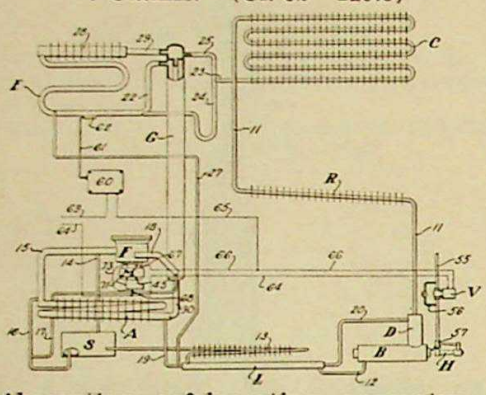
12 Claims. (Cl. 62—119.5)



1. Absorption refrigerating apparatus including a generator, a heater for said generator, a fluid circulator, power operated means for driving said circulator refrigeration demand responsive means for controlling said heater, means responsive to a change in the condition of a portion

of said apparatus reflecting a change in the operating condition of said heater for energizing starting connections for said power operating means, and means for subsequently deenergizing said starting connections and for energizing running connections for said power operated means.

2,310,761
REFRIGERATION
George P. Daiger, Canton, Ohio, assignor to The Hoover Company, North Canton, Ohio
Application February 5, 1940, Serial No. 317,379
7 Claims. (Cl. 62—119.5)



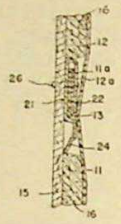
1. Absorption refrigerating apparatus comprising a boiler, a condenser, an evaporator, an absorber and a fluid circulator connected in circuit, a drive motor for said fluid circulator including a rotating part at least partially submerged in a lubricant which is non-fluid at atmospheric temperatures, a field winding for said motor, a heater for said boiler, control means for said apparatus arranged to energize said heater and to energize said motor field in such fashion that the same generates a high starting torque and high heat and means responsive to a change in the thermal condition of a portion of the apparatus induced by energization thereof by said control means for energizing said field in such fashion that it produces a normal running torque and a low heat.

2,310,762
PRODUCTION OF AROMATIC VINYL COMPOUNDS
Guenther Daumiller and Gunthard Hoffmann, Ludwigshafen-on-the-Rhine, Germany; vested in the Alien Property Custodian
No Drawing. Application August 9, 1940, Serial No. 352,006. In Germany August 9, 1939
3 Claims. (Cl. 260—669)

1. The process for the production of styrene which comprises subjecting a carboxylic acid ester of phenylethyl alcohol to a temperature of from about 500° C. to about 700° C.

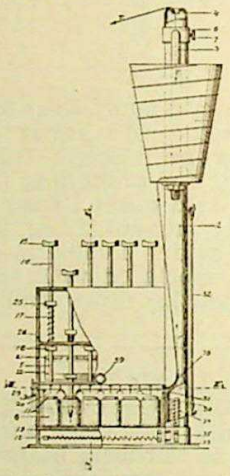
2,310,763
BLIND MOLDING
Clarence J. Davies and Alvin C. Lind, Detroit, Mich., assignors to National Automotive Fibres, Inc., Detroit, Mich., a corporation of Delaware
Application October 20, 1941, Serial No. 415,834
8 Claims. (Cl. 45—138)

2. A trim panel comprising a panel board, a blind molding strip secured thereto, said molding strip having a reversely bent flange extending along one edge, a cover over said panel board made up of separate pieces of trim material secured to said panel board adjacent its edges and having adjacent edges thereof clamped beneath the reversely bent flange, said pieces extending in opposite directions from said strip, whereby said strip is completely concealed and the free edge of said flange forms a break-over strip for one of said pieces, the other edge of said strip



having a raised bead or riser of a height about equal to the combined double thickness of strip material and the clamped edges of said pieces of trim material.

2,310,764
APPARATUS FOR DYEING THREADS OR YARNS FOR TEXTILE MACHINES AND THE LIKE
Harold H. Denhof, New York, N. Y.
Application October 7, 1939, Serial No. 298,346
6 Claims. (Cl. 68—9)

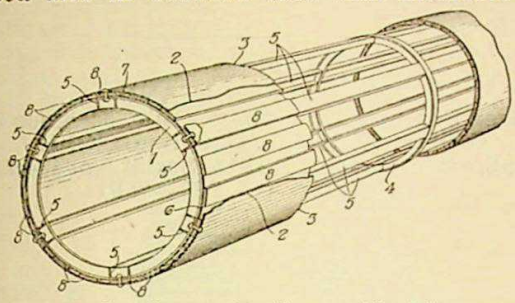


2. An apparatus for continuously dyeing threads or yarns comprising at least one reel adapted to supply thread, a hollow body, a plurality of vats each containing a dyestuff of a different color, a plurality of containers arranged adjacent to said dyestuff vats, each of said containers containing a liquid adapted for a further treatment of a dyed thread, the number of said after treatment containers being equal to the number of said dyestuff vats, means for moving the thread supplied by said reel first over each and all of said vats and thereafter over each and all of said containers, means for moving the thread through a predetermined vat and through a predetermined container, means for heating said dyestuff vats, further means for heating said after treatment containers, still further means for heating said hollow cylinder, and means for moving the thus dyed and treated thread through said heated cylinder whereby the thread is dried.

2,310,765
AIRCRAFT STRUCTURE
Claude Dornier, Friedrichshafen-on-the-Bodensee, Germany; vested in the Alien Property Custodian
Application November 4, 1938, Serial No. 238,749
In Germany December 11, 1937
4 Claims. (Cl. 244—117)

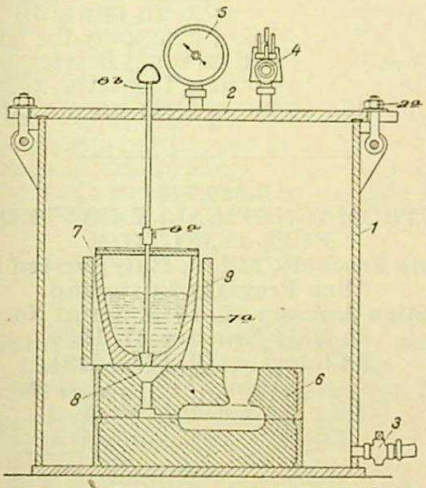
1. A light, sheet like structural element for the

construction of the walls of substantially hollow parts of aircraft, said element including two sheet like skin members, and pressure resisting flat strips disposed in the direction of the main stresses to which said structural element is subjected and in between said skin members and



fully and closely contacting said skin members with the flat sides, the thickness of said strips being at least twice the thickness of said skin members and being different in accordance with the different stresses to which said structural element is subjected at different parts thereof.

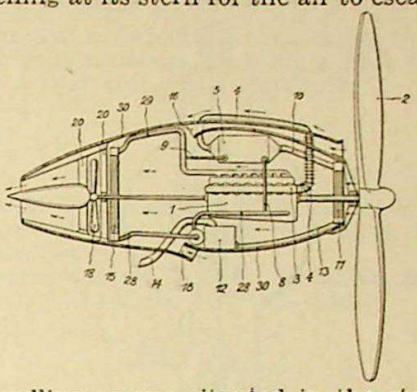
2,310,766
CASTING METALS
Josef Dornauf, Frankfort-on-the-Main, Germany; vested in the Alien Property Custodian
Application October 17, 1939, Serial No. 299,881
In Germany December 7, 1938
6 Claims. (Cl. 22—209)



1. A process of casting metals under pressure from a crucible to a mold which comprises passing molten metal from the crucible to the mold while simultaneously subjecting the metal in the crucible and in the mold to a pressure of at least five atmospheres in excess of atmospheric pressure.

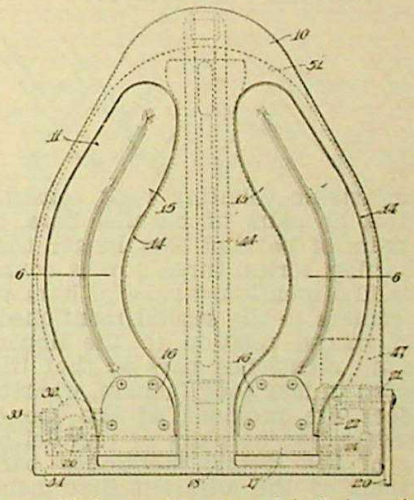
2,310,767
WATER RECOVERY DEVICE FOR AIRSHIPS
Ludwig Dürr, Friedrichshafen-on-the-Bodensee, Germany; vested in the Alien Property Custodian
Application November 29, 1938, Serial No. 242,952
In Germany December 30, 1937
15 Claims. (Cl. 244—95)

1. In a stream-line shaped motor car for airships in combination, an outer shell, a motor therein, a propeller in front of said shell driven by said motor, devices for cooling down the exhaust gases of said motor and for condensing the water vapor contained therein by means of cooling air, said devices being situated inside of said outer shell, said shell having at least one opening in its bow for the entrance of the air accelerated by said propeller and having a nozzle-like opening at its stern for the air to escape, and



air-propelling means situated in the stern portion of said shell to accelerate the air passing through said shell, said air-propelling means and said motor being in driving connection.

2,310,768
STERILIZING CABINET
Walter L. Eckhardt, Overbrook, Pa., assignor to Hygeian Corporation, Philadelphia, Pa., a corporation of Pennsylvania
Application April 25, 1940, Serial No. 331,567
8 Claims. (Cl. 4—233)

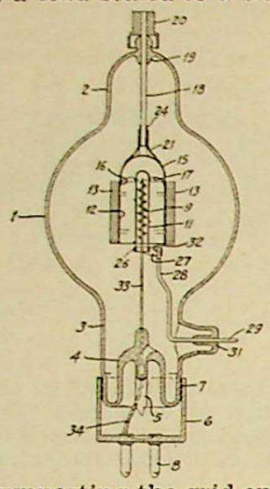


1. A sterilizing cabinet and toilet seat comprising a house having an apertured face, a toilet seat of such contour as substantially to fill the orifice in said face, means mounting the seat for movement into and out of the said orifice, reflecting means in the cabinet having portions curved about the free edges of the toilet seat when the latter is disposed in the cabinet, and a source of radiant energy within the housing arranged to be incident upon two sides of the said toilet seat by reflection from said curved portions.

2,310,769
ELECTRONIC TUBE
William W. Eitel, San Bruno, and Jack A. McCullough, Millbrae, Calif., assignors to Eitel-McCullough, Inc., San Bruno, Calif., a corporation of California
Application July 13, 1942, Serial No. 450,753
5 Claims. (Cl. 250—27.5)

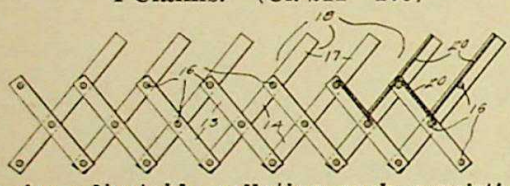
3. An electronic tube comprising an envelope having a reentrant stem at one end thereof, a plurality of electrodes including a plate and grid and cathode in the envelope, a lead sealed to the

other end of the envelope, a cap on one end of the plate, means on the cap supporting the plate on said lead, a lead sealed to a side of the enve-



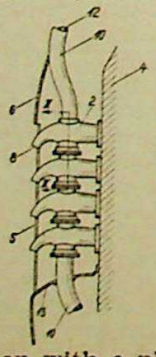
lope, means supporting the grid on the last mentioned lead, and leads for the cathode sealed to said stem.

2,310,770
ADJUSTABLE RACK
Luther W. Evans, Richmond, Va.
Application August 14, 1941, Serial No. 406,892
4 Claims. (Cl. 211—179)



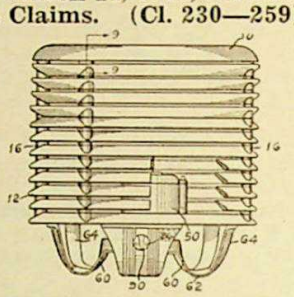
1. An adjustable collating rack consisting of spaced series of pairs of parallel bars, spaced series of pairs of parallel bars longer than the bars of the first series, three dowels connecting each of the first mentioned pairs of bars at their ends and centers to the second mentioned pairs of bars in spaced relation to the upper ends of the second mentioned bars so that the bars are connected in lazy tong fashion, whereby collating spaces are provided at the top of the rack between adjacent pairs of parallel oblique extensions of the second mentioned bars and those portions of the adjacent first mentioned bars located between the upper and center dowels of the bars.

2,310,771
EXHAUST CONDUIT CONSTRUCTION
Anselm Franz, Dessau, Germany; vested in the Alien Property Custodian
Application July 19, 1939, Serial No. 285,403
In Germany August 15, 1938
4 Claims. (Cl. 60—35.6)



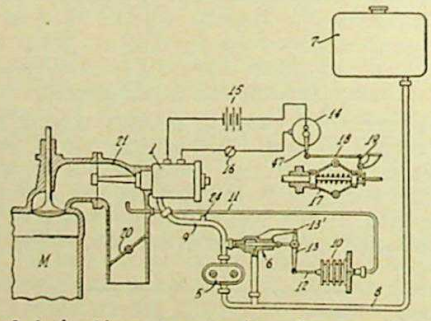
1. In combination with a plurality of exhaust conduits, each of which has the form of a recoil producing nozzle, a seamless pipe successively extending through each conduit, and means for sealing the openings in the walls of said conduits through which said pipe passes against the leakage of exhaust gases from said conduits.

2,310,772
PLASTIC FAN STAND
Alfred F. Fukal, Cincinnati, Ohio, assignor to William W. Welch, Cincinnati, Ohio
Application March 14, 1942, Serial No. 434,749
14 Claims. (Cl. 230—259)



1. A base for a fan stand assembly having a motor and a guard consisting of a stack of hoops, said base including a centrally disposed annular motor supporting portion, said motor supporting portion having a plurality of equally spaced leg portions integral therewith, each of said leg portions merging into a floor engaging portion being radially disposed with respect to said annular portion and terminating in an upwardly directed channel portion forming a support for the hoops, said upwardly directed channel portion being arranged in spaced relation from the motor supporting portion so as to form an air circulating passage.

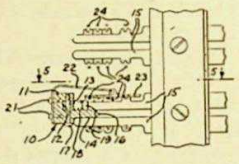
2,310,773
ELECTROMAGNETICALLY CONTROLLED FUEL INJECTION
Ottavio Fuscaldo, Milan, Italy; vested in the Alien Property Custodian
Application January 26, 1940, Serial No. 315,734
In Italy January 27, 1939
2 Claims. (Cl. 123—119)



1. Fuel injection apparatus for explosion engines, comprising a series of valved fuel injectors for the engine cylinders, each electromagnetically operable for timed quick opening and closing of its valve, an engine-driven electric distributor adapted for adjustably predetermining the angular timing and the duration of opening of the several injector valves, an engine-driven speed-responsive regulating centrifuge device having connection to the distributor for adjusting the latter for regulation by the centrifuge of the angular duration of each injection and arranged to increase such angular duration with faster engine speed and vice versa thereby to maintain a substantially steady actual time duration of each injection; an engine-driven volumetric fuel pump

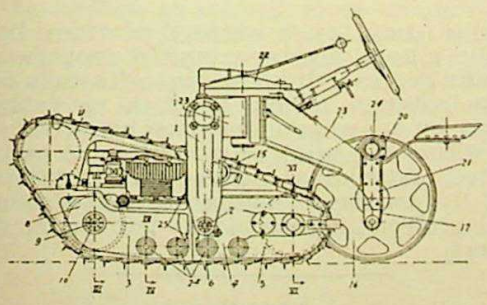
delivering by its pressure pipe to the series of injectors, adjustable means associated with the pump for modifying the rate of flow of pumped fuel to the injectors, and a pressure-responsive capsule instrument in communication with and operated from the air pressure in the engine intake for adjusting said fuel-flow-modifying means and arranged to reduce the rate of fuel flow to the injectors with decrease of intake air pressure and vice versa; whereby the fuel injected into each cylinder in each cycle is proportioned substantially to the air inflow to maintain substantially steady the air-fuel ratio under varying intake pressures and engine speeds.

2,310,774
WIRING FIXTURE
Howard W. Garbe, Hinsdale, and Herman Saravalli, Chicago, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y., a corporation of New York
Application January 11, 1940, Serial No. 313,403
1 Claim. (Cl. 29—89)



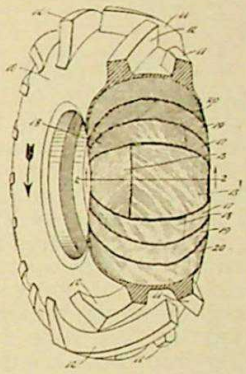
A wiring fixture comprising a terminal engaging bar adapted to engage the edges of a row of terminals, a spring pressed member mounted on said bar, a hold down bar pivotally mounted on the free end of the spring for forcing wires into engagement with the opposite edges of said row of terminals, and spacing means mounted on the bar between the spring pressed member and the bar for properly positioning the terminals, said spacing means comprising a serrated member having the teeth thereof pointed to guide the terminals to position.

2,310,775
MOTOR TRACTOR
Tullio Gavagnin, Genoa-Pegli, Italy; vested in the Alien Property Custodian
Application October 13, 1939, Serial No. 299,371
In Italy October 20, 1938
5 Claims. (Cl. 180—9.1)



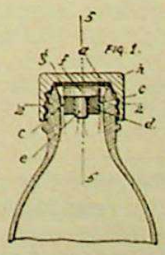
1. A motor tractor comprising a driving unit and a wheeled supporting and trailing member hinged to the driving unit, the driving unit being constituted of a pair of carters rigidly connected together, so as to form a carter block, a motor within one of said carters, a large gear wheel, driven by the motor, guide rollers fitted at the periphery of said carters, tensioning and shock-absorbing rollers fitted at the forward end of the carter block, an endless track meshing with said gear wheel and running on said guide rollers, tensioning and shock-absorbing rollers and around the carter block and assuming a substantially triangular shape, a pair of upright members and means for connecting the said driving unit to the lower end of a pair of said upright members, and a head block connecting the upper ends of said members to form a unit for supporting a rear end wheel structure.

2,310,776
TIRE
Vincent B. Gay, Clinton, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a corporation of New York
Application April 12, 1941, Serial No. 388,288
9 Claims. (Cl. 152—356)



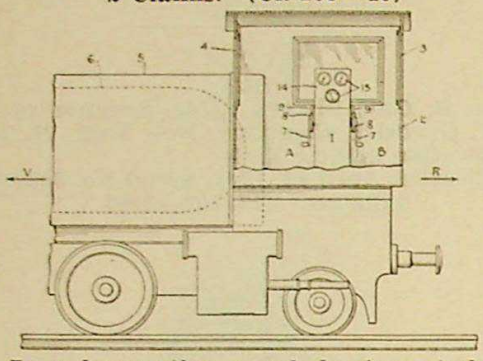
5. A pneumatic tire having a flexible body of rubber-like material engageable with a rim and including a pair of sidewalls and a ground-engaging tread, said body comprising a layer of cords in a sidewall at the inner face of the tire having the cords thereof extending diagonally from a rim-engaging portion to a portion at the tread of the tire, and a second layer of cords in the other sidewall at the inner face of the tire having the cords thereof extending in a diagonal direction to converge with the cords of the first said layer from a rim-engaging portion to a position at the tread of the tire, whereby torsional forces transmitted between the tread and the rim through said body exert less tension on the cords of both said layers at said inner face when the tire is driven in said direction of convergence of the cords than when it is driven in the opposite direction.

2,310,777
DROP-COUNTING BOTTLE
Pietro Giavotto, Genoa, Italy; vested in the Alien Property Custodian
Application March 18, 1940, Serial No. 324,711
In Italy March 24, 1939
4 Claims. (Cl. 221—148)



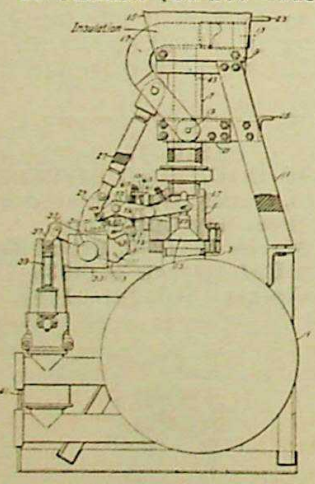
1. In a drop-counting bottle the combination, a bottle neck having a substantially polygonal shaped opening the sides of which are curved convexly and provide a number of grooves along the intersections of said sides, a block made of resilient material forcibly inserted in said opening, and a cap for closing the mouth of the bottle.

2,310,778
CAB FOR FIRELESS LOCOMOTIVES
Paul Gilli, Vienna, Germany; vested in the Alien Property Custodian
Application July 6, 1940, Serial No. 344,288
In Germany July 21, 1939
2 Claims. (Cl. 105—48)



1. In a locomotive, a cab having windows at opposite ends thereof for vision in both directions of movement of the locomotive, a table located centrally of the cab between the windows and extending parallel thereto for dividing the cab into forward and reverse operating compartments, and a single set of control members for both forward and reverse movements of the locomotive supported by the table in position for equal accessibility from both compartments, said control members being constructed and mounted for movement in the same direction from the respective compartments for controlling both forward and reverse movements of the locomotive.

2,310,779
CIRCUIT INTERRUPTER
Erik H. Hall, Wilkinsburg, and Raymond H. Leitzel, Forest Hills, Pa., assignors to Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa., a corporation of Pennsylvania
Application October 24, 1941, Serial No. 416,360
15 Claims. (Cl. 200—148)

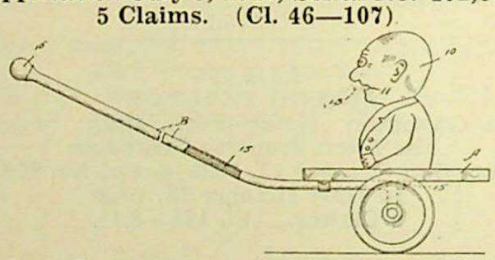


1. In a circuit interrupter of the gas-blast type, separable contacts for establishing an arc, operating means for actuating said contacts to open and to closed positions, a valve arranged to be supplied with gas under pressure, an actuating member for operating said valve to establish an arc extinguishing blast of gas, said contact operating means including a member movable in accordance with the opening and closing movements of said contacts, said member having a cam surface, an additional actuating portion carried by said member, a coacting cam roller hingedly secured to said valve actuating member, means biasing said cam roller to an operative position with respect to said valve actuating member to cause said cam surface to engage said cam roller and thus to operate said valve actuating member during the normal opening movement of said contacts, said cam roller being movable to an inoperative position relative to said valve actuating member without imparting motion to said valve actuating member during the closing movement of said contacts, and means comprising a rotatable member pivotally supported by said valve actuating member and rotatable with respect thereto to engage said additional actuating portion so as to operate said valve actuating member to open said valve in the event of reversal of said contact operating means prior to closure of said contacts during a closing operation of said interrupter and while said cam roller is in inoperative position.

2,310,780
VINYL ESTERS OF TERTIARY CARBOXYLIC ACIDS
William Edward Hanford and Walter Edwin Mochel, Wilmington, Del., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a corporation of Delaware
No Drawing. Application September 5, 1940, Serial No. 355,524
15 Claims. (Cl. 260—73)

1. A polymerizable vinyl ester of an aliphatic monocarboxylic acid of not more than twelve carbon atoms having the carbon attached to the carboxyl attached to four carbon atoms.

2,310,781
TOY
Vincent C. Harris, Wilmette, Ill.
Application July 9, 1941, Serial No. 401,647
5 Claims. (Cl. 46—107)

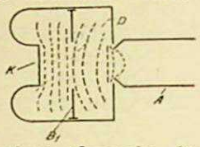


1. In a figure toy, a wheeled platform having a handle, a body member mounted upon the platform and representing the bust of a human being, including a hollow head, a yieldably influenced tongue supporting member wholly disposed within the head with the tongue normally retracted, and manual means controlled from the end of the handle for actuating said member to quickly project the tongue through the mouth of the head.

2,310,782
ELECTRONIC TELEVISION TRANSMITTER
Walter Heimann, Berlin, Germany; vested in the Alien Property Custodian
Application July 24, 1940, Serial No. 347,126
In Germany July 25, 1939
6 Claims. (Cl. 250—162)

1. An electron image device comprising a large surface plane cathode adapted to emit electrons, an anode for receiving said electrons, a chamber having a diameter greater than said cathode mounted between said cathode and said anode and joined to said cathode, means for

producing an electrostatic field in said chamber having equi-potential lines, and a diaphragm in said chamber for shaping equi-potential lines of said field within said chamber, said diaphragm being mounted coaxial with said cathode and



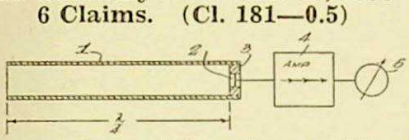
having an opening therein in the order of the diameter of said cathode and said equi-potential lines being substantially parallel to said plane cathode in the region adjacent said diaphragm and between said diaphragm and said cathode.

2,310,783

MEASURING DEVICE

Johann-Georg Helmbold, Berlin, Germany; vested in the Alien Property Custodian

Application November 10, 1939, Serial No. 303,922
In Germany November 10, 1938
6 Claims. (Cl. 181—0.5)



1. In a sound amplifier the combination including a spherical resonant chamber for receiving sound waves to be amplified, means responsive to said sound waves within said resonant chamber for converting said sound waves to electrical impulses, and means including a liquid disposed within said resonant chamber for varying volume of said spherical chamber and hence the resonant frequency of said chamber.

2,310,784

PROCESS FOR THE PREPARATION OF GAS MIXTURES FOR CATALYTIC PROCESSES

Wilhelm Herbert, Frankfort-on-the-Main-Eschersheim, Germany; vested in the Alien Property Custodian

No Drawing. Application January 27, 1939, Serial No. 253,227. In Germany August 23, 1937
1 Claim. (Cl. 23—2)

In the process for the preparation of gas mixtures which are to be subjected to a catalytic process involving the steps of treating the gases with active carbon at normal room temperature for the purpose of freeing them from organic sulphur compounds and any resin-formers present, and thereafter subjecting the gases to hot purification by contact with a strongly alkalinized iron oxide mass at a temperature above 100° C., the improvement according to which the active carbon charged with organic sulphur compounds is regenerated for reuse by passage therethrough of residual synthesis gases followed by steaming.

2,310,785

UPHOLSTERING MATERIAL

Conrad Herrmann, Wuppertal-Elberfeld, Germany; vested in the Alien Property Custodian

No Drawing. Original application November 5, 1937, Serial No. 173,043. Divided and this application July 21, 1939, Serial No. 285,727. In Germany November 5, 1936
3 Claims. (Cl. 154—54)

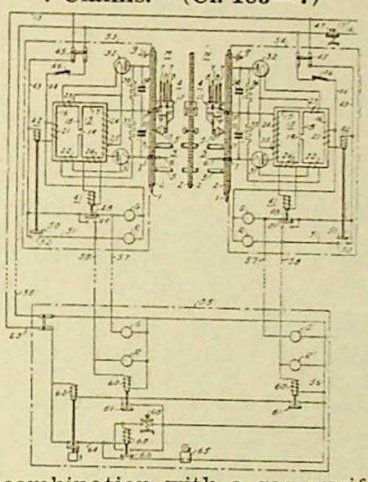
1. As an upholstery material, a dry body consisting of two laminae of regenerated cellulose intimately bonded together, said body being of about the thickness of horsehair, one of said laminae being under compression and the other under tension to bias the body into spiral form, both laminae being outshrunk and characterized by their ability to retain their respective compression and tension under the influence of moisture.

2,310,786

ELECTRICAL DUST-PRECIPITATOR INDICATING SYSTEM

Ralph L. Hildebrand, Lakewood, Ohio, assignor to Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa., a corporation of Pennsylvania

Application May 21, 1941, Serial No. 394,459
7 Claims. (Cl. 183—7)



1. The combination with a gas-purifying precipitator-assembly comprising gas-duct means having therein electrostatic gas-cleaning means for charging foreign particles in the gas, and for electrostatically precipitating said charged particles, means for energizing said gas-cleaning means comprising relatively high-voltage voltage-conversion means comprising step-up transformer means, rectifying means and capacitor voltage-smoothing means having output terminals adapted to supply rectified voltages, insulated short-lead electrical connections for connecting said output terminals to said gas-cleaning means; of low-voltage signal means cooperating with said transformer means, comprising a signal and a remote alarm for actively indicating a faulty operation-condition of said precipitator-assembly as reflected in said transformer means, normally-inactive means operable for cancelling said alarm operation but retaining said signal operation during said faulty operation-condition, said gas-duct means comprising door means for controlling the energization of said gas-cleaning means by said high-voltage voltage-conversion means, and for automatically restoring said normally-inactive means and alarm to inactive but operable condition for subsequent operation in accordance with their operations as aforesaid, upon deenergization of said gas-cleaning means.

2,310,787

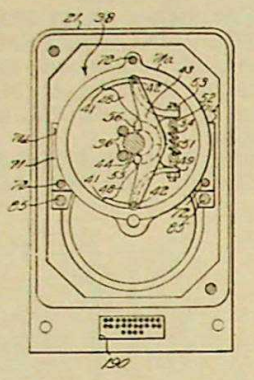
FRICTION BRAKE MECHANISM FOR MOTOR DRIVEN ELECTRIC SWITCHES AND THE LIKE

Peder B. Hoye, Maywood, Ill., assignor to Electrical Engineers Equipment Co., Melrose Park, Ill., a corporation of Illinois

Application May 27, 1939, Serial No. 276,040
6 Claims. (Cl. 192—8)

1. In friction brake mechanism of the class

described, the combination of rotary driving and driven members adapted to revolve in either direction, a relatively stationary friction brake surface, a brake shoe rotating with said driven member and operative to have frictional engagement with said brake surface, a pair of abutment shoulders carried by said shoe through which brake releasing force is adapted to be



transmitted to said brake shoe, said abutment shoulders having swinging movement about an axis extending substantially parallel to the axis of said driven member, and driving means rotating with said driving member for transmitting brake releasing force through one of said abutment shoulders for one direction of rotation and through the other of said abutment shoulders for the other direction of rotation.

2,310,788

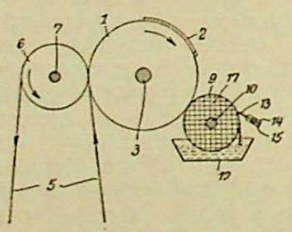
MEANS FOR INKING PRINTING FORMS

Wilhelm Hümmelchen, Siegburg, Germany; vested in the Alien Property Custodian

Application January 9, 1939, Serial No. 250,010

In Germany January 18, 1938

3 Claims. (Cl. 101—350)



1. An apparatus for inking a rubber printing form comprising a resiliently mounted inking roller having an inflexible meshed surface, an ink supply, scraping means for cleaning the surface after it has been inked, and means for supporting the roller and printing form relatively so that the cleaned surface of the roller bears against the printing form with uniform pressure.

2,310,789

LINEAR POLYMERIC AMIDINE SALTS

Madison Hunt and James Emory Kirby, Wilmington, Del., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application August 2, 1940, Serial No. 350,108

22 Claims. (Cl. 260—2)

1. A polymer characterized by the presence, as integral chain members, of primary amidine salt groups wherein the extralinear valences of the intralinear nitrogen atoms, not satisfied by hydrogen, are satisfied by alkyl radicals of from one to five carbon atoms, and the amidine salt groups are separated by bivalent organic radicals free from groups reactive with the hydrogen bearing amino group and the imino ether group, and having a carbon containing chain of at least four atoms between the free valences which valences stem from carbon.

10. Process which comprises reacting an adiponitrile dimethyl diiminoether salt of an acid having an ionization constant of at least 1×10^{-5} with hexamethylenediamine to yield a polymeric hexamethyleneadipamidine salt.

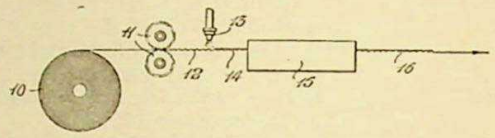
2,310,790

OPTICAL REFLECTING MATERIAL

Thoger G. Jungersen, Mimico, Ontario, Canada

Application November 19, 1937, Serial No. 175,541

28 Claims. (Cl. 88—105)



1. A sheet having one of its surfaces formed with a plurality of indentations so formed in accordance with the laws of optics as to reflect light in the general direction of its source though a line from the source to the sheet be not perpendicular, said indentations being filled with a material substantially transparent, the reflecting units formed by the said indentations being of such design as to reflect substantially all the light transmitted to them from the light source, the depth of the units being within the range of approximately one-tenth of an inch or less.

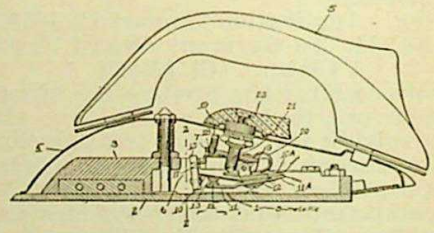
2,310,791

THERMOSTATIC SWITCH

Alvin D. Keene, Rochester, N. Y., assignor to Samson United Corporation, Rochester, N. Y., a corporation of Delaware

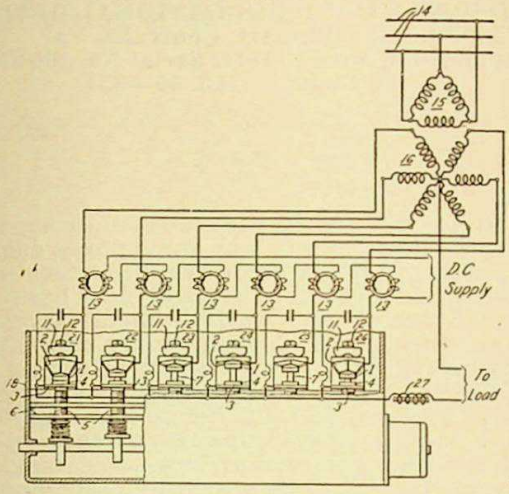
Application December 31, 1940, Serial No. 372,599

2 Claims. (Cl. 200—138)



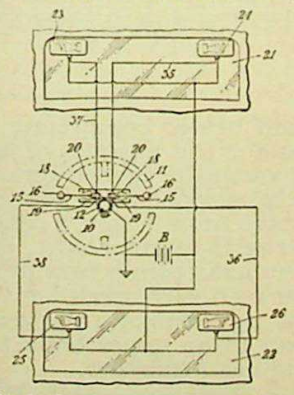
1. In a switch for operation by a thermoresponsive member, the combination of a switch support, a rocker member mounted to swing on said switch support, spring means interposed between said rocker member and said switch support for movement of said rocker member in one direction, adjustable setting means carried by said switch support for movement of said rocker member in the opposite direction, a pair of switch members carried by said rocker member in yielding contact with each other for joint movement with said rocker member, a movement limiting member carried by one of said switch members, stop means on said switch support for engagement of said movement limiting member to limit the joint movement of said switch members by said spring means in one direction and limit the movement of the switch member carrying the movement limiting member in its movement with the other switch member in the opposite direction.

2,310,792
CONVERTER
Floris Koppelmann, Berlin-Siemensstadt, and Hugo Frass and Reinhard Penk, Berlin, Germany; vested in the Alien Property Custodian
Application April 19, 1941, Serial No. 389,362
In Germany March 6, 1940
13 Claims. (Cl. 175—364)



10. In a contactor device, a contactor comprising a movable contact, a substantially fixed counter-contact, a substantially triangular spring anchored at the base and carrying the movable contact adjacent the tip, a plate spring carrying the counter-contact, a base member, insulating means for securing said plate spring and said triangular spring on said base, a substantially tubular adjusting screw secured in said base and contacting the plate spring adjacent the counter-contact, there being an opening in said plate spring coinciding with the opening in the adjusting screw and an insulated push rod extending through said adjusting screw and said opening for actuating said movable contact.

2,310,793
AUTOMOBILE DIRECTION INDICATOR
Godfried Kryl, Inwood, N. Y., assignor of one-third to Aaron A. Mott, Cedarhurst, N. Y.
Application February 21, 1940, Serial No. 319,994
3 Claims. (Cl. 200—59)



1. In a switch for controlling direction indicating and similar signals in vehicles or the like and adapted to be mounted upon the steering column and beneath the steering wheel, a clamp comprising two spaced brackets with at least two extensions arranged in opposite directions away from the steering column, resilient blades secured at the ends of said extensions, weighted handles at the ends of the blades, a pair of spaced, resilient contact tangs secured to and insulated from each of said extensions, the tangs of each pair being disposed at both sides of and being normally spaced from said blades, the latter being adapted to alternately touch and swing away from their respective tangs when caused to vibrate in response to a vigorous deflection imparted to the blades by way of said weighted handles.

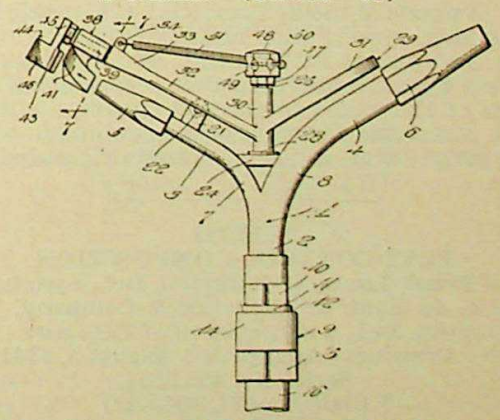
2,310,794
RESINS FROM FUSED UREA
Otto L. Kupfer, New York, N. Y., assignor to Stein, Hall & Company, Inc., New York, N. Y., a corporation of New York
No Drawing. Application May 1, 1940, Serial No. 332,689
15 Claims. (Cl. 260—69)

1. The method of forming a condensation product of urea and a dry solid formaldehyde compound comprising fusing urea to effect substantial transformation of the urea to biuret, subsequently adding to the fusion a dry formaldehyde compound selected from the group consisting of the solid polymers of formaldehyde and hexamethylenetetramine, and heating the mixture in the absence of water to form the resin.

2,310,795
EMULSION FOR TREATING TEXTILES
Fred G. La Piana, Forest Hills, N. Y., and Herman S. Bosland, Paterson, N. J., assignors to Stein, Hall & Company, Inc., New York, N. Y., a corporation of New York
No Drawing. Application August 31, 1939, Serial No. 292,894
7 Claims. (Cl. 106—146)

1. A composition of matter in emulsion form comprising 5 to 30 parts of an alkaline-soluble protein, 3 to 10 parts of an organic protein solubilizing agent, 5 to 20 parts of urea, 5 to 75 parts of water, and 5 to 75 parts of a liquid hydrocarbon boiling within the range of about 50 to 250° C.

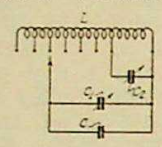
2,310,796
LAWN SPRINKLER
Ralph W. Lappin, Salina, Kans.
Application May 19, 1941, Serial No. 394,203
2 Claims. (Cl. 299—69)



1. A sprinkler including a rotatable body, and means swingingly mounted on the body for imparting step by step rotative movement to the body, said means including a striking arm, a diverting block swingingly connected with the striking arm, an operating block fixed to the striking arm outwardly of the diverting block, said diverting block being positioned to receive a stream of fluid under pressure from the body and being

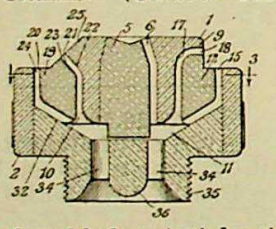
swung out of said stream by the pressure of the stream for exposing the operating block to said stream, pressure of fluid against said operating block swinging the striking arm on the body, and means for urging the striking arm into contact with the body.

2,310,797
FREQUENCY VARIATION COMPENSATION CIRCUIT
Norman Lea, Brentwood, England, assignor to Radio Corporation of America, a corporation of Delaware
Application April 27, 1942, Serial No. 440,678
In Great Britain August 8, 1940
4 Claims. (Cl. 250—40)



1. In a tuned circuit comprising an inductance coil having a plurality of spaced tapping points, a tuning condenser connected between one end of the inductance and a selected one of the tapping points, at least two reactance devices for compensating for variation in frequency with temperance variation, one reactance device being in shunt with the tuning condenser, a second reactance device being connected between said one end of the inductance and a predetermined tapping point of the inductance other than said one tapping point.

2,310,798
SPRAY NOZZLE
John O. Lewis, New York, N. Y., assignor of one-half to Arnold Muller, New York, N. Y.
Application May 6, 1941, Serial No. 392,057
8 Claims. (Cl. 299—143)

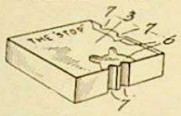


2. A nozzle of molded material, said nozzle having a shell formed with radially extending openings, and inserts fitted within said openings and having a groove and a surface co-operating with parts of the walls around said openings whereby each insert and the walls of the opening in which it is fitted forms a pair of converging water orifices.

2,310,799
PEST CONTROL COMPOSITION
John Frank Lontz, Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a corporation of Delaware
No Drawing. Application August 5, 1941, Serial No. 405,555
7 Claims. (Cl. 167—22)

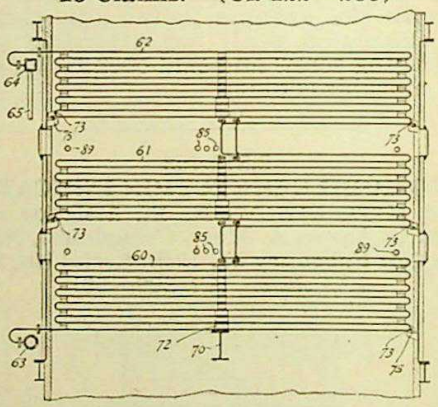
1. A pest control composition useful for controlling economically harmful lower forms of life, including bacteria, fungi and insects, containing as an active ingredient a salt of a linear polymeric amidine having as integral chain members recurring bivalent groups consisting of a trivalent nitrogen having one valence attached to a member of the class consisting of hydrogen and alkyl groups of from one to five carbon atoms and a second valence attached to a chain carbon which is in turn attached by a double bond to a hydrogen-bearing imino group, said recurring bivalent groups being connected by divalent organic radicals having their valences stemming from carbon which organic radicals are free from groups reactive with amidine salt groups.

2,310,800
AMUSEMENT AND EDUCATIONAL DEVICE
Frank J. Manhart, Centralia, Va.
Application June 6, 1941, Serial No. 396,935
10 Claims. (Cl. 35—35)



1. An amusement and educational device comprising a set of at least four game pieces adapted for arrangement in a predetermined order or sequence in two or more vertical and horizontal rows in accordance with indicia appearing thereon, each game piece having a plurality of indicating means thereon adapted to register with like indicating means on an adjacent game piece in the vertical and horizontal rows when said game pieces are properly arranged in said rows, the positions of said indicating means on said game pieces having a definite predetermined relation to the indicia appearing on said game pieces.

2,310,801
STEAM GENERATOR
Dana H. N. Mayo, Ridgewood, N. J., and Arthur E. Raynor, Rockville Centre, N. Y., assignors to The Babcock & Wilcox Company, Newark, N. J., a corporation of New Jersey
Application July 16, 1938, Serial No. 219,562
13 Claims. (Cl. 122—235)

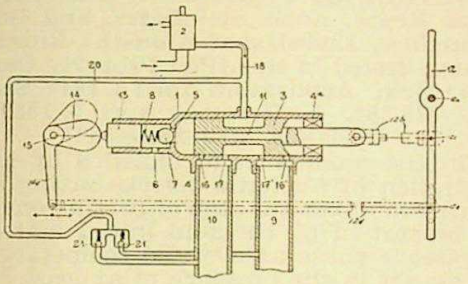


12. In a fluid heater comprising a setting enclosing a pass for the passage of heating gases, a plurality of vertically spaced serially connected banks of multiple-looped fluid heating tubes horizontally arranged in said pass, a center beam support for the lowermost tube bank, and means including rigid tubular connectors providing a flow connection between corresponding tubes of vertically adjacent tube banks arranged to transmit the center load of an upper bank to said lowermost bank and beam support.

2,310,802
BRAKE MECHANISM
Jean Mercier, Paris, France; vested in the Alien Property Custodian
Application April 15, 1939, Serial No. 268,094
In Great Britain April 27, 1938
6 Claims. (Cl. 303—6)

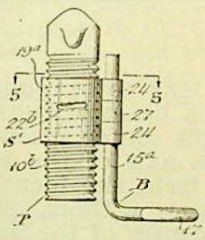
1. Distributor system for two fluid pressure

actuated brakes comprising one supply and exhaust line for fluid under pressure communicating with a valve body, two conduits for supply and exhaust of fluid pressure to and from said brakes, each conduit communicating with said valve body through a pair of openings, valve means inside said valve body, an exhaust port in said valve body, and means for operating said valve-means from the outside, said valve means being adapted to afford communication, in its



neutral position, between said line and two openings, each communicating with one of said conduits, while obstructing the remaining openings, and, when displaced from its neutral position, to restrict progressively the communication between said line and one of said conduits and simultaneously to afford, progressively, communication between said one conduit and said exhaust port, without affecting the condition of the other conduit.

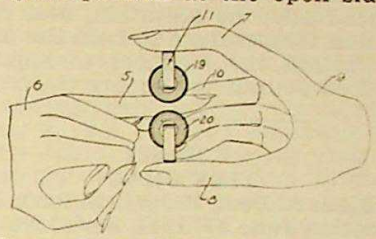
2,310,803
ADJUSTABLE ELEVATION POST AND INSULATOR CONSTRUCTION
Samuel C. Miller, New York, N. Y.
Application December 12, 1940, Serial No. 369,798
6 Claims. (Cl. 248—50)



2. In means for mounting a luminous gaseous discharge tube on a backing, a bracket adapted to be secured to said backing and having a standard, a socket member having a standard engaging portion permitting pivotal movement of the same about said standard, said socket having a post engaging portion formed to engage said post, permitting pivotal movement of said post thereon, said socket member comprising a strip of material S-shaped in cross section, forming spaced loops respectively forming post and standard engaging portions for resiliently and frictionally holding said post and standard, permitting axial adjustment of said post and standard.

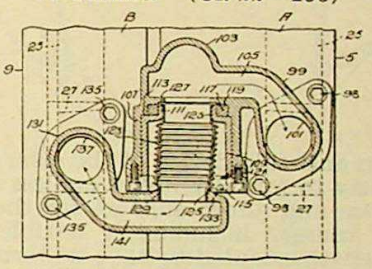
2,310,804
MASSAGING DEVICE
Marguerite M. Morrison, Glencoe, Ill.
Application May 19, 1941, Serial No. 394,049
6 Claims. (Cl. 128—57)

3. In a digit massaging device, a resilient frame shaped to provide confronting yoke-shaped end portions with a connection therebetween at one side only and the opposite side being open between the yoke portions, and a reversely bent portion spaced from and underlying each yoke portion and attached to the respective yoke portion at the open side of the



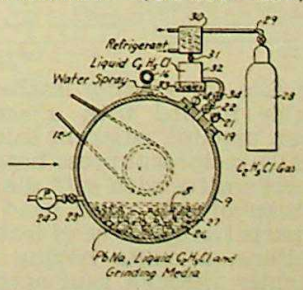
frame only, and a roller journaled in each of said reversely bent portions.

2,310,805
MOLD
Paul M. Mueller, Rome, N. Y., assignor to Revere Copper and Brass Incorporated, Rome, N. Y., a corporation of Maryland
Original application June 5, 1941, Serial No. 396,696. Divided and this application June 12, 1942, Serial No. 446,723
14 Claims. (Cl. 22—153)



1. A mold having, in combination, a pair of mold parts connected for relative swinging and movement transverse to the axis of such swinging, one of which mold parts is provided with a passage for cooling medium, conduit means for conducting cooling medium supplied to said passage, which conduit means comprises a laterally bendable, torsion resisting, cooling medium conducting sleeve, the axis of which latter is approximately coaxial with the axis of relative swinging of said mold parts, said sleeve at one end thereof being operatively carried by one of said mold parts, and, at its opposite end, being operatively swiveled on the other of said parts for axial rotation relative thereto.

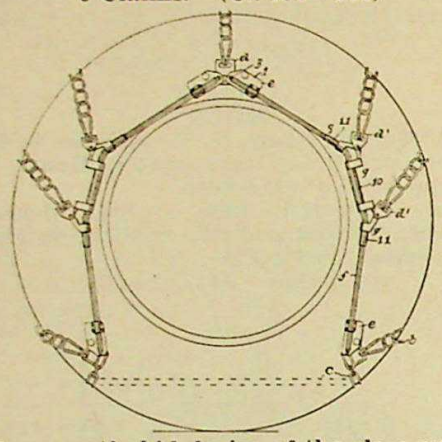
2,310,806
METHOD FOR PRODUCING TETRAETHYL LEAD
Ira Cuppy Nourse, Tulsa, Okla.
Application August 19, 1940, Serial No. 353,174
2 Claims. (Cl. 260—437)



1. The method of producing tetraethyl lead including, placing a lead sodium alloy in an enclosed reaction chamber, drawing a sufficient vacuum in said chamber to remove air and moisture therefrom, measuring the required amount of a liquefied ethyl halide, introducing the ethyl halide into the chamber with the aid of said

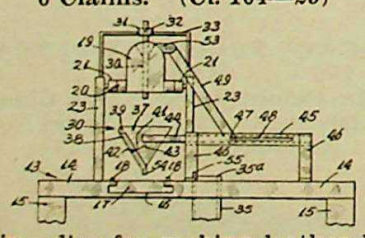
vacuum, comminuating the alloy in said chamber, effecting reaction of the ethyl halide with the reduced alloy by agitation, and controlling the reaction temperature to hold the autogenous pressure within the chamber to approximately one hundred pounds per square inch.

2,310,807
TIRE CHAIN
William A. Pool, Ridgefield Park, N. J.
Application June 17, 1941, Serial No. 398,363
6 Claims. (Cl. 152—242)



1. In an anti-skid device of the class set forth, an assembly to form the inner endless system of such device and afford support for the traction elements thereof including a flexible non-extensible length adapted to have its terminals arranged to project in opposite direction and be thereupon each moved, in the direction in which it projects, in wiping contact with the other terminal, said terminals respectively having means coactive to interlock them, when they are so moved, against movement in the opposite directions, and an elastic extensible length penetrating said terminals and connecting points of the first-named length both sides of said means.

2,310,808
CUTTING DIES FOR MAKING LEATHER BELT PARTS
Joseph Raggi, New York, N. Y.
Application May 18, 1942, Serial No. 443,371
6 Claims. (Cl. 164—25)

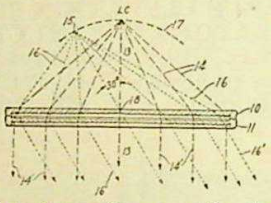


1. Cutting dies for making leather belt parts having a table formed with a stationary die section and an opening adjacent said die section and a vertically reciprocal press head carrying a die section cooperative with said die section in a lowered position of said press head for cutting leather belt parts from a piece of leather between said die sections, a chute having its top end extended slightly through said opening and its bottom end discharging into a receiving basket, a horizontally slidable container having a normal position beneath said press head in its raised position to receive a cutout belt part from the die section of said press head, means for moving said container from its position beneath said press head to a position over the top end of said chute when said press head moves downwards, said container having an openable wall resiliently urged closed, and means for opening said wall when said container is above said chute so that said belt part may drop from the container into the top end of the chute to be conveyed to said basket by said chute.

2,310,809
METHOD OF PREPARING DIOLEFINS
Walter Reppe, Adolf Steinhofer, and Guenther Daumiller, Ludwigshafen-on-the-Rhine, Germany; vested in the Alien Property Custodian
No Drawing. Application April 6, 1940, Serial No. 328,382. In Germany April 6, 1939
8 Claims. (Cl. 260—682)

1. In the production of diolefins by catalytic dehydration of aliphatic glycols having at least four carbon atoms the step of passing one molecular proportion of the said initial materials in the gaseous phase at elevated temperature over the catalyst in the presence of at least one molecular proportion of a vaporized organic compound which is liquid under ordinary conditions and which is not decomposed under the conditions of reaction.

2,310,810
LUMINAIRE
Thomas W. Rolph, Newark, Ohio, assignor to Holophane Company, Inc., New York, N. Y., a corporation of Delaware
Application November 27, 1940, Serial No. 367,334
7 Claims. (Cl. 240—106.1)

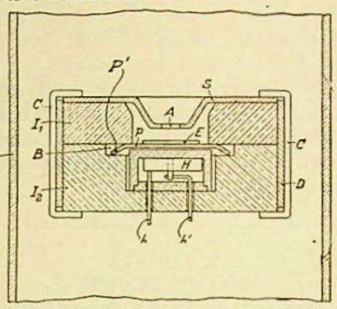


1. A doublet lens for producing on opposite sides of its axis a beam of substantially parallel rays from a point source when the source is in the focus in the axis of the lens or when the source is offset from the focus as much as 30° from the lens axis without change in its distance from the center of the lens, the lens comprising two pieces through which rays travel in succession, each piece being smooth on the side toward the source and carrying condensing prisms on the side away from the source, the refracting power of the prisms of the first piece being a function of the distance from the center such that the corresponding virtual light sources recede with increase of said distance, the refracting power of the opposed areas of the outer piece being a function of their distance from the lens center such that rays from the corresponding virtual sources are refracted into substantial parallelism with the undeviated ray passing through the center of the doublet lens.

2,310,811
CATHODE-RAY TUBE
Erich Schantl and Maximilian Messner, Berlin, Germany; vested in the Alien Property Custodian
Application April 1, 1941, Serial No. 386,267
In Germany March 29, 1940
3 Claims. (Cl. 250—27.5)

1. A cathode ray tube including a cathode and a control electrode, an insulating body between said cathode and control electrode for establishing the spacing therebetween, another insulating

body on the side of said cathode remote from said control electrode, at least one of said bodies having a cavity therein for retaining said cathode therein, said cathode having a yieldable preformed peripheral edge for urging said bodies to separate from each other when pressed together, centering means inserted over said bodies and said control electrode for aiding in holding them together, and spring clip means for holding said bodies from separating and for holding said control electrode in position relatively to said body and said cathode.



3. A cathode ray tube according to claim 1 in which a heating element is provided in a casing of insulating material in said cathode retaining cavity.

2,310,812

METHOD OF MANUFACTURING OILS OF HIGH STABILITY

Friedrich Schick, Berlin-Schoneberg, Germany; vested in the Alien Property Custodian

No Drawing. Application July 6, 1938, Serial No. 217,726. In Germany July 9, 1937

9 Claims. (Cl. 196—39)

1. Method of manufacturing oils of high stability which comprises blending a hydrocarbon oil of predominately aliphatic character and relatively rich in saturated hydrocarbon components with at least 10% of a hydrocarbon oil of predominately aliphatic character and containing a substantially smaller amount of saturated hydrocarbons, said two oils having similar boiling ranges and being members of the group consisting of Diesel fuel oils and lubricating oils, at least one of said oils containing a substance which renders the mixture unstable, and subjecting the mixture to a treatment by contact with a relatively small amount of a chemical precipitating agent.

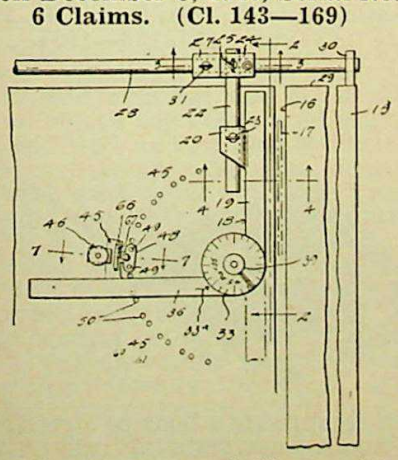
2,310,813

WORK GUIDE FOR SAW TABLES

Gilbert J. Sellmeyer, Indianapolis, Ind.

Application December 6, 1940, Serial No. 368,928

6 Claims. (Cl. 143—169)



5. In combination a saw table provided with a saw slot and an opening at one side of said slot, a work guide structure engageable on the upper surface of said table, and means engaging one end of said structure for supporting said one end from said table, said structure comprising a pair of elongated guide members and means pivotally securing said members together, one of said members having a pair of right angularly disposed downwardly opening slots therein with one slot deeper than the other, said pivotal means including a right angular pin engageable in a selected slot, engagement of said pin in the shallower of said slots, disposing said pivotal means partly below said one member for engagement in said table opening.

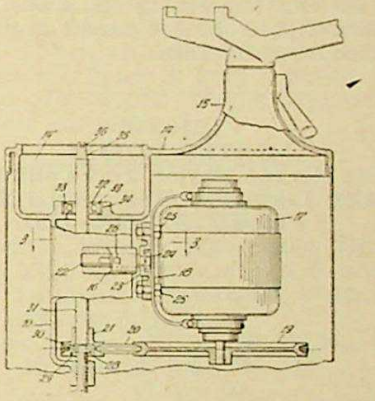
2,310,814

PORTABLE MOTOR DRIVEN CREAM SEPARATOR

Charles R. Stout, Waterloo, Iowa, assignor to Clifford E. Butler, Waterloo, Iowa

Application September 23, 1940, Serial No. 357,872

2 Claims. (Cl. 233—24)



1. In a cream separator, a spindle frame, a bowl spindle, a relatively small drive pulley mounted on the lower end of the spindle, a pivotal ball bearing inserted in the pulley with the center line of the bearing on the center line of the pulley groove, a spindle adjustment screw supporting the spindle from the inner race of the ball bearing, and a flexible spindle bearing mounted adjacent the upper end of the spindle, the structure permitting free pivotal spinning of the spindle from the lower ball bearing.

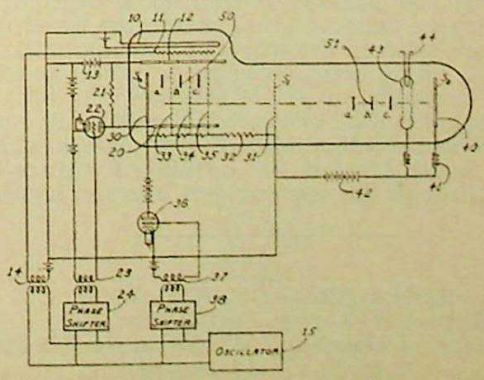
2,310,815

ACCELERATION HIGH FREQUENCY GENERATOR

Howard M. Strobel, Allegany, N. Y.

Application December 31, 1940, Serial No. 372,562

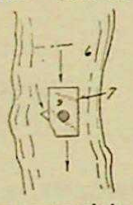
26 Claims. (Cl. 250—36)



1. In a high-frequency generating system utilizing high velocity charged particles in an evac-

uated vessel and including at least two electrode members spaced along a given path to form consecutive regions, the method of high-frequency generation which includes the steps of: forming a group of charged particles having a given space dimension of length; directing said group along said given path; creating an electrostatic field in any of said regions by controlling the voltage applied to the electrode members defining said region, said field being controlled with respect to the passage of said group through said region, so that during the time interval of passage of said group into said region said field is at most substantially equal to the field in the preceding region, and so that during the time interval of passage of said group from said region said field is at least substantially equal to the field in the following region, and so that any change in the strength of said field takes place during other time intervals such that an equal effect is produced simultaneously upon all the charged particles in said group; and collecting energy from said accelerated group of moving charged particles; whereby the velocity of said group is increased without increasing its space dimension of length and the collector circuit is energized by a high-frequency impulse.

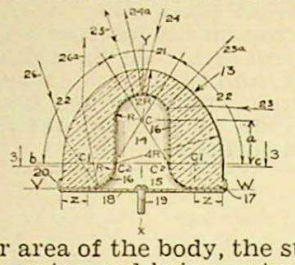
2,310,816
WATER MOTOR
August Morgan Taylor, Fort Collins, Colo.
Application January 19, 1942, Serial No. 427,234
2 Claims. (Cl. 170—119)



1. A water motor comprising, a housing having a top and a bottom connected by two spaced side walls, one at least of which has an arcuate portion curved about a center positioned between the walls, both ends of the housing being open, the end facing the concave side of the arcuate portion being the intake, a water wheel in the housing, mounted to rotate about an axis perpendicular to the top and bottom, said water wheel having a central hub and spaced sides projecting radially beyond the hub, a plurality of angularly spaced pivots extending between the sides near their peripheries, vanes carried by said pivots, stops for limiting the angular movements of the vanes, towards the hub, to substantially radial position, the vanes being slightly wider than the distance between the pivots whereby they will be limited in their movements away from the hub to positions substantially tangential, a deflector in the entrance opening for directing the water into the space between the wheel and the arcuate side wall, the vanes being movable to radial position in the direction of wheel rotation, the arcuate wall having at least one opening and an outwardly and upwardly extending deflector plate attached to the housing below the opening, for directing water through the opening and into the housing.

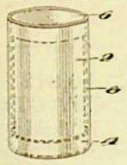
2,310,817
REFLECTING OPTICAL UNIT
August M. Taylor, Fort Collins, Colo.
Application March 3, 1942, Serial No. 433,116
3 Claims. (Cl. 88—82)

1. An optical unit of the reflector type comprising a transparent body of substantially ellipsoidal shape, having a flat base perpendicular to the major axis, the body having an axially concentric opening extending inwardly from the base, the inner end of the opening being substantially semi-spherical and substantially concentric



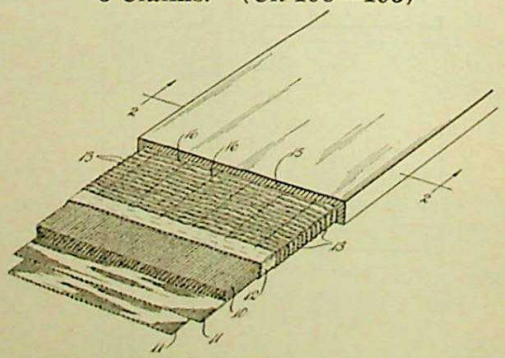
with the polar area of the body, the surface of the opening at its outer end being outwardly flaring on a substantially circular arc whose outer edge is tangent with the base, the opening having a lining of reflecting material.

2,310,818
CONTAINER
Harold D. Tompkins, Summit, N. J.
Application May 26, 1942, Serial No. 444,568
1 Claim. (Cl. 229—4.5)



A two-part, cylindrical container, the two parts of which are readily separable, comprising an inner cylinder, a cap for one end of the inner cylinder secured permanently thereto, a cap for the other end of the cylinder frictionally engageable therewith and readily removable therefrom, the outside diameters of the caps being slightly greater than the outside diameter of said inner cylinder, and an outer cylinder, having an inside diameter substantially the same as the outside diameter of said caps, whereby said outer cylinder telescopes over the inner cylinder and engages frictionally with said caps and holds the removable cap in place, the outer cylinder being readily applied to and removed over said caps, the container being openable without rupture of its parts and so capable of continued re-use.

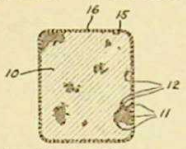
2,310,819
CONVEYER BELT
Paul W. Van Orden, Cuyahoga Falls, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a corporation of New York
Application June 6, 1941, Serial No. 396,864
3 Claims. (Cl. 198—193)



1. A belt comprising a body of stretch-resisting material, and a wear resisting rubber cover vulcanized thereto, said cover having a layer of

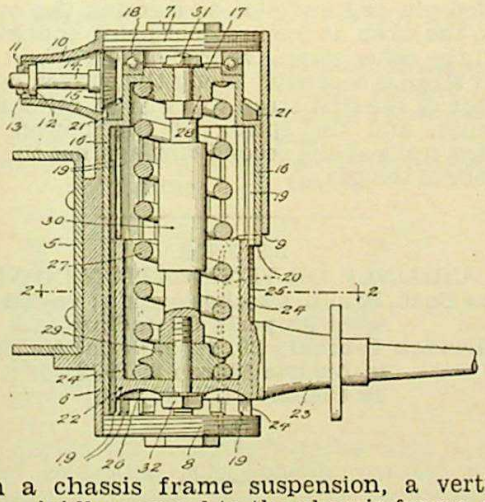
transversely disposed cord elements embedded in its material-supporting face, the ends of said elements extending around the lateral margins of the belt body and the elements being disposed in a non-straight manner across the belt with the rubber cover material surrounding the elements and disposed between them as tying portions varying in cross-section.

2,310,820
MAGNETIC CORE
Ernest G. Walters, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a corporation of New York
Application March 8, 1941, Serial No. 382,397
9 Claims. (Cl. 117—100)



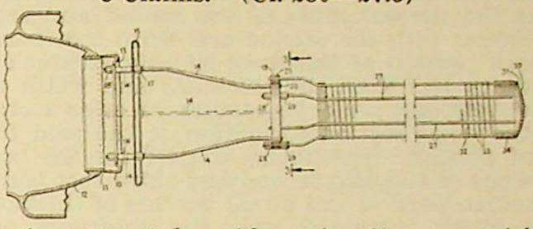
1. In a method of coating a magnetic core, the steps of applying a mixture of alkyd resin and titanium dioxide particles over the surface of the core in a uniform layer, heating the core to mature the resin, tumbling the core, applying a mixture of alkyd resin and titanium dioxide particles over the first layer, and again heating the core to mature the resin in the second layer.

2,310,821
CHASSIS FRAME SUSPENSION
Raymond L. Wimbish, Roanoke, Va.
Application November 1, 1941, Serial No. 417,553
6 Claims. (Cl. 280—96.2)



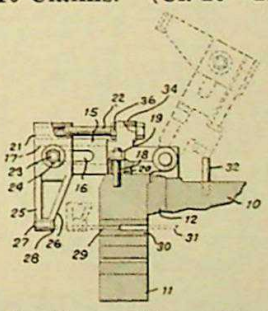
1. In a chassis frame suspension, a vertical cylinder rigidly secured to the chassis frame, cylinder closures secured to the upper and lower ends of said cylinder, a vertical sleeve rotatably received in said cylinder and substantially coextensive in length therewith, said sleeve having an upper end wall and being provided with internal splines, a weight supporting bearing interposed between said upper end wall of said sleeve and the upper end closure of said cylinder, a piston slidable in said sleeve and having external splines meshed with said splines of said sleeve, a coiled vertical weight supporting spring supporting said upper end wall of said sleeve, the lower end of said spring being supported by said piston, a wheel spindle rigidly secured to said piston and projecting laterally therefrom, said sleeve and cylinder having openings through which said spindle extends for required movements, and means operatively connected with said sleeve for rotating the same for steering.

2,310,822
GRID CONSTRUCTION
Carson M. Wheeler, Montclair, N. J., assignor to Federal Telephone and Radio Corporation, a corporation of Delaware
Application February 14, 1942, Serial No. 430,909
8 Claims. (Cl. 250—27.5)



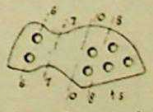
3. A vacuum tube grid construction comprising a plurality of grid rods, a threaded end portion on each of said rods, a grid attached to said rods, a supporting member for said grid provided with holes, said holes being rounded out at each end, and adapted to fit loosely over the threaded end portions of said rods, a pair of nuts for each rod having rounded faces, said nuts being screwed on said rods on opposite sides of said supporting member with their rounded faces extending into the rounded out holes in said support, whereby the position of said grid may be adjusted in reference to said support.

2,310,823
FEED STOP
Richard Lester Wilcox, Waterbury, Conn., assignor to The Waterbury Farrel Foundry and Machine Company, Waterbury, Conn., a corporation of Connecticut
Application January 5, 1942, Serial No. 425,670
10 Claims. (Cl. 10—11)



1. In combination with a die block through which material is fed; a backing plate having lugs thereon at a point above and in rear of the face of the die block; a base plate hinged to the lugs; a stop arm thereon which is opposite the face of the die block when the stop means is in its operative position; and a stop plug in the stop arm in the path of the material.

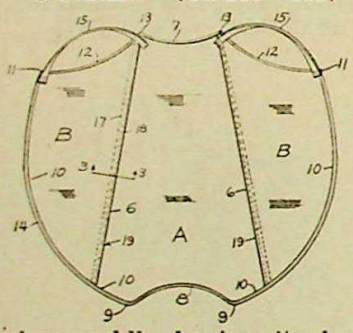
2,310,824
ORTHOPEDIC APPLIANCE
Fred E. Wyant, Anderson, Ind.
Application May 26, 1941, Serial No. 395,145
2 Claims. (Cl. 128—80)



2. An orthopedic pad consisting of a flat bottomed spongiform body structure, an impervious coating thereon, a cover sheathing of soft pliant material integrated with said coating and having spaced perforations therein at the forward portion and at the rearward portion of said body,

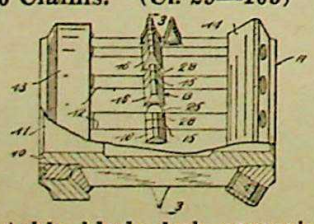
the forward portion of said body being of predetermined thickness, its top surface being of convex formation transversely, its inner lateral edge being straight, its frontal edge being straight, and its outer lateral edge being curvate, and each of said edges being of feather edge thinness, the said forward portion constituting a riser for the jointures of the second and third toe bones with the second and third foot bones, a neck portion of thickness slightly greater and of width less than the thickness and width respectively, but which is similar in cross section to the cross section formation of the said forward portion, constituting a riser for the body portions of the said second and third foot bones, a median portion and a rear portion of thickness and width increased over the thickness and width respectively of said neck portion, the top surface of said median and rear portion being convex longitudinally and convex transversely, the outer lateral edge, each of the edges of the median portion, and the outer lateral edge of the rear portion being curvate in plan formation and of feather edge thinness, and the inner lateral edge of the said rear portion being of predetermined thickness and inclined rearwardly away the longitudinal axis of said body, constituting a riser for the jointures of the rear portions of the first, second and third foot bones with the first, second and third cuneiform bones, the navicular bone, and medial one half of the cuboid bone.

2,310,825
TURKEY SADDLE
Harry L. Abramson, Idaho Falls, Idaho
Application May 26, 1942, Serial No. 444,553
3 Claims. (Cl. 119—143)



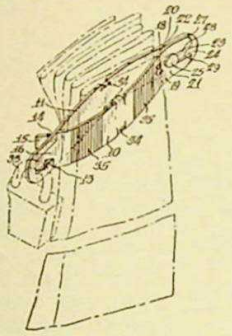
1. A turkey saddle having its body portion formed of a single piece of flexible fabric and having a central back panel and depending side aprons when the saddle is in position on a hen, separated by toeholds formed by an elongated tubular pocket enclosing a fabric cord, the tubular pocket being positioned with its outer surface in contact with the central back panel and secured thereto by stitching extending through the pocket and the enclosed cord.

2,310,826
HOB
William P. Adams, Cleveland Heights, Ohio
Application May 6, 1939, Serial No. 272,191
10 Claims. (Cl. 29—105)



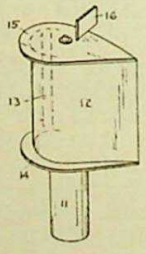
1. An insertable blade hob comprising a cylindrical-like body member having a plurality of longitudinally extending external grooves therein, blade members having hob teeth thereon positioned in said grooves, means for individually adjusting said blade members longitudinally of said body member, and means for securing said blade members in said grooves.

2,310,827
BAG CLAMP
Charles Edwin Anderson, Narberth, Pa., assignor of one-half to William H. Jefferies, Moylan, Pa.
Application December 9, 1941, Serial No. 422,227
18 Claims. (Cl. 24—30.5)



7. In a clamp for the open ends of bags, a pair of bowed straps of resilient material having opening and closing movement with respect to each other generally lengthwise of the straps, a T-head and slot pivotally and longitudinally movable connection between the straps at one end, and headed pin and end slot connecting the opposite ends, the strap at the first slot being concaved toward the other strap, whereby the T-head of the other strap is accessible along the convex opposite surface of the first strap to assist in releasing the fastener, and the spring of the bowed straps tighten walls of the second slot against the under surface of the pin.

2,310,828
CHIMNEY OR VENTILATION COWL
Oskar Back, Brunn, Czechoslovakia; vested in the Alien Property Custodian
Application February 20, 1939, Serial No. 257,361
In Austria March 2, 1938
10 Claims. (Cl. 98—70)



1. A chimney or ventilation cowl comprising in combination a flue, a hollow tubular body covering said flue, said hollow tubular body composed of at least one pair of units of wing form of suitable length and of stream-line cross sections, one of said units being the inverse image of the other and both of said units symmetrically displaced with regard to a common longitudinal axis, said hollow body turnably arranged upon said flue and suction openings in both said units at, or in proximity to, the places, where the highest velocities of the ambient air current occur.

2,310,829

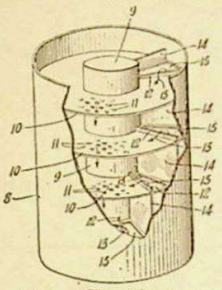
PROCESS OF AND APPARATUS FOR DEGASIFYING LIQUIDS AND WASHING GASES

Rudolf Becker, Munich-Solln, Germany; vested in the Alien Property Custodian

Application August 6, 1940, Serial No. 351,621

In Germany August 17, 1939

5 Claims. (Cl. 261—113)



2. Apparatus for effecting contact between a liquid and a gas which comprises an outer casing; an inner axial member; a series of annular perforated trays forming annular chambers with said outer casing and said member; a partition extending across each annular chamber and joining consecutive trays; said partitions being disposed in staggered relation to each other; each tray being provided with a gas passage opening therethrough, each such gas passage opening being adjacent to and on the same corresponding side of the respective partition across the chamber above the tray having such opening; and at least one dam extending across each annular tray for maintaining a desired maximum depth of liquid on each tray.

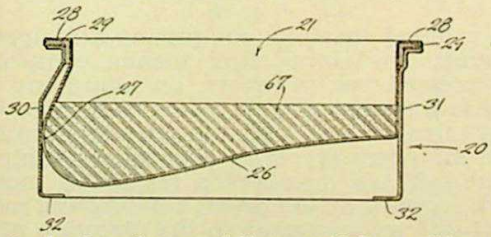
2,310,830

MOLDING APPARATUS FOR OPEN TYPE CUSHIONS

George W. Blair and John F. Schott, Mishawaka, Ind., assignors to Mishawaka Rubber and Woolen Manufacturing Company, Mishawaka, Ind., a corporation of Indiana

Application June 4, 1937, Serial No. 146,392

16 Claims. (Cl. 18—34)



1. A device for molding articles with a plurality of elongated substantially parallel cored out openings therein, said device comprising a mold pan with a cavity therein of varying depth, a removable cover and fastening means by which the cover is secured to the mold pan to close the cavity, said cover having a plurality of apertures therethrough, and elongated coring elements mounted in said apertures to close same and project into the mold cavity, said elements being individually shiftable lengthwise in their respective apertures for adjustment according to the varying depth of the cavity of the mold pan.

2,310,831

SUPERCHARGER REGULATION

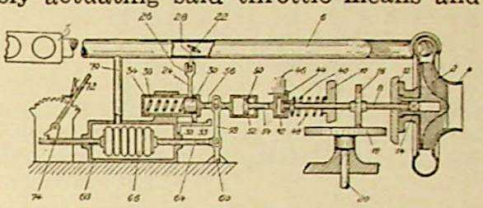
Friedrich Bielitz, Dessau-Ziebigk, Germany; vested in the Alien Property Custodian

Application November 25, 1939, Serial No. 306,173

In Germany December 10, 1938

6 Claims. (Cl. 123—119)

1. A control mechanism for regulating air pressure delivered from a supercharger to an engine comprising throttle means for regulating the flow of air from said supercharger to the engine at pressures below the air pressure produced by said supercharger at its minimum operating speed, change speed transmission means for driving said supercharger, and means for simultaneously actuating said throttle means and said



transmission means for throttling the air flow from said supercharger and for changing said transmission means to give the lowest supercharger speed to produce pressures below the air pressure produced by said supercharger at its lowest operating speed, and for opening said throttle means and changing said transmission means to increase said supercharger speed to produce increased air pressures.

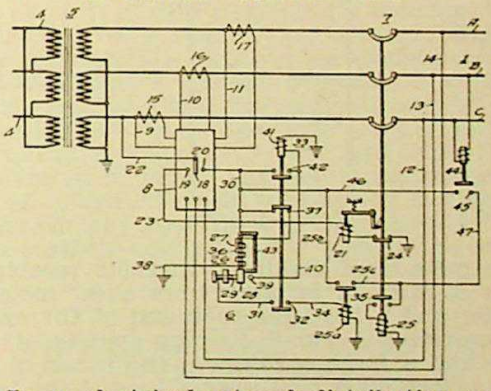
2,310,832

NETWORK DISTRIBUTION SYSTEM

Myron A. Bostwick, Budd Lake, N. J., assignor to Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa., a corporation of Pennsylvania

Application January 10, 1940, Serial No. 313,253

19 Claims. (Cl. 175—294)



1. In an electrical network distribution system, a feeder circuit, a network transformer having a primary winding connected for energization from said feeder circuit and having a secondary winding, a network circuit connected for energization directly from said secondary winding, a circuit breaker for controlling the connection of said network circuit to said secondary winding, means responsive to the direction of power flow between said feeder and network circuit for tripping said circuit breaker, control means including a pair of contacts, said control means being responsive to a predetermined condition of said network distribution system for closing said contacts to initiate a closure of said circuit breaker, and means effective only if said predetermined condition persists over a time interval measured from the closure of said contacts for closing said circuit breaker, said time interval being in excess of ten seconds.

2,310,833

CONCRETE BLOCK MOLDING MACHINE

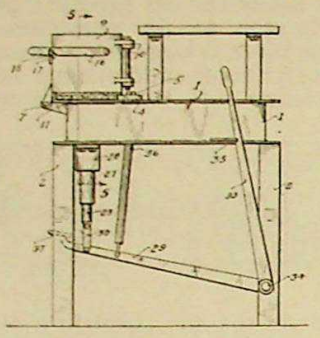
Benjamin Brekke, Longview, Wash.

Application June 19, 1942, Serial No. 447,705

6 Claims. (Cl. 25—41)

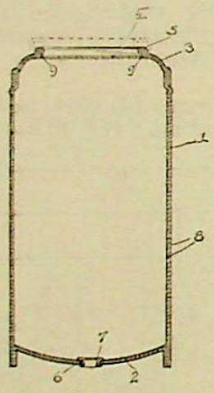
1. A concrete block molding machine, includ-

ing a mold box, a core movable into and out of the mold box, said core including side walls and end walls and being open at the top and bottom.



slots in the side walls to receive reinforcing members for the block, means for closing the slots above the reinforcing members, and means for closing the top of the core.

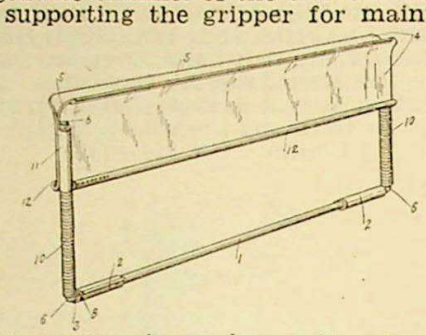
2,310,834
METHOD OF MAKING PRESSURE TANKS
Giles E. Bullock, Rochester, N. Y.
Application May 8, 1940, Serial No. 334,017
1 Claim. (Cl. 29—148.2)



The method of making a metallic receptacle which consists in forming from sheet metal a cylinder and a head for each end of the cylinder, providing a small opening in one of the heads and a large opening in the other of the heads, providing a closure seat around the large opening of one of the heads by raising the marginal portion of said head around its large opening in the form of an inverted channel, telescopingly connecting the heads to the cylinder and then immersing the entire receptacle in a galvanizing bath so as to cause the galvanizing material to enter the large opening in one of said heads and displace the air thru the small opening in the other of said heads and thus coat its entire area inside and out to fasten and seal the heads to the cylinder and simultaneously provide a core in the hollow portion of the closure seat.

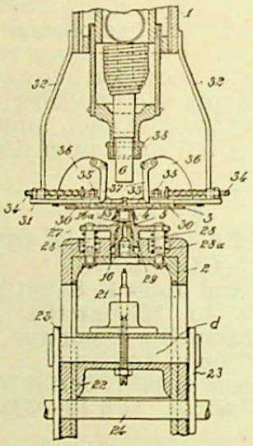
2,310,835
PORTABLE MAIL HOLDER
James Kelley Burleigh, Yonkers, and John Arthur Weis, New York, N. Y.
Application June 21, 1940, Serial No. 341,662
4 Claims. (Cl. 24—66)

1. A portable mail holder comprising a base having a right angled section at each end thereof, a sleeve having a lengthwise channel mounted at each end of said base, a gripper for each section rotatably secured thereto, and a spring for each gripper secured to the gripper and to the lengthwise channel of the sleeve nearest the section supporting the gripper for maintaining



tension in said springs when said grippers are moved away from each other.

2,310,836
RIVETING MACHINE
Karl Butter, Rostock, Germany; vested in the Alien Property Custodian
Original application October 14, 1938, Serial No. 235,043. Divided and this application February 9, 1940, Serial No. 318,164. In Germany November 17, 1936
10 Claims. (Cl. 78—48)

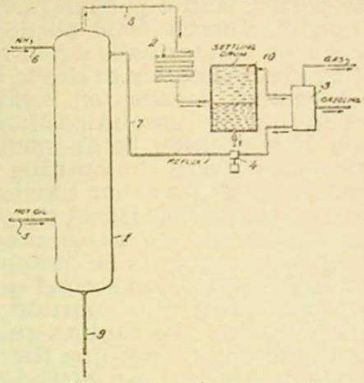


1. A riveting machine comprising a reciprocable stamp, rivet-supporting means comprising spring-pressed jaw members, an abutment carried by said stamp, pivoted levers connected with the jaw members and operable by said abutment during an operative stroke of said stamp to separate said jaw members, a resiliently mounted work support, an abutment for limiting movement of said work support in the direction of the operative stroke of said stamp, a fixedly mounted holder-up, a passage in said work support for receiving said holder-up upon movement of said work support in the direction of the operative stroke of the stamp, a passageway in said holder-up and a reciprocable spindle receivable within said passageway to form with said holder-up a snap-head die.

2,310,837
PETROLEUM DISTILLATION
John H. Carpenter, Cambridge, Mass., and Robert B. Kennedy and Harry J. McClanahan, Beaumont, Tex., assignors to Socony-Vacuum Oil Company, Incorporated, New York, N. Y., a corporation of New York
Application September 18, 1941, Serial No. 411,326
3 Claims. (Cl. 196—35)

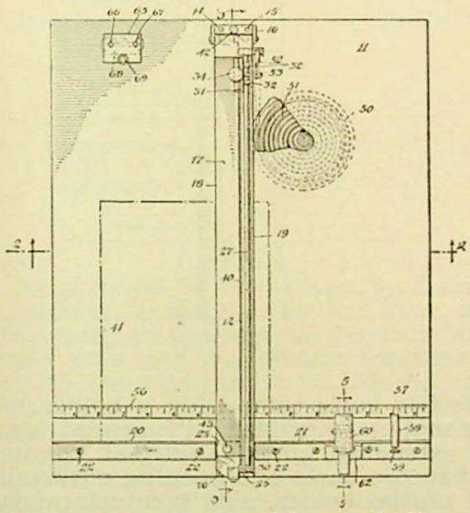
1. In a method of fractionally distilling wherein a petroleum oil is fractionally distilled in the presence of steam and ammonia in a distillation

zone to obtain overhead and bottoms, the overhead is condensed in a condensing zone, fixed gas separated therefrom in a separating zone and a portion of the condensate returned to said distillation zone as reflux for the distilling operation; the improvement which comprises passing con-



densate from said condensing zone to an enlarged settling zone wherein said condensate is held in a relatively quiescent state, removing aqueous matter settled from said condensate in said settling zone and thereafter passing said condensate to said separating zone.

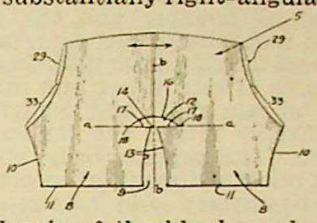
2,310,838
PAPER CUTTER
David T. Helprin, New York, N. Y.
Application December 22, 1941, Serial No. 423,961
7 Claims. (Cl. 164—73)



1. A paper cutting machine including a base, a channel in said base running longitudinally thereof, a hinge member at one end of said base astride said channel, an arm on said hinge member, a slot in said arm, posts adjacent each end of said arm, a rod mounted in said posts, a carriage slidably mounted on said rod, a cutting member on said carriage extending through said slot in said arm into said channel, and resilient means for yieldingly maintaining said carriage at one end of said rod.

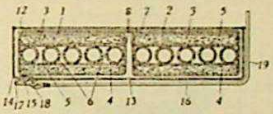
2,310,839
MAN'S UNDERGARMENT
Franklin Chatfield and Jennie M. Lindh, Minneapolis, Minn., assignors to Munsingwear, Inc., Minneapolis, Minn., a corporation of Delaware
Application December 23, 1941, Serial No. 424,122
3 Claims. (Cl. 128—159)

1. A main body blank for a garment comprising leg forming portions and having a segment-shaped opening therein whose longitudinal axis is disposed in substantially right-angular relation to



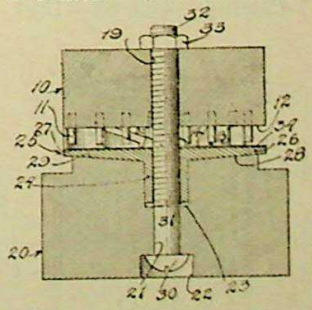
the vertical axis of the blank, and suitable slits extending into the fabric from the ends of said opening to facilitate formation of the leg portions of the garment.

2,310,840
LIFESAVING CUSHION
Hedley Stidston Crabtree, Caterham, England
Application February 20, 1940, Serial No. 319,937
In Great Britain March 7, 1939
4 Claims. (Cl. 9—17)



1. A life saving cushion comprising a life belt and casing therefor, the life belt including two buoyant generally rectangular elements and a web of flexible material, an edge of each of said elements being attached to an end of said web respectively, securing means along the opposite edge of each of said elements for securing them to the body of a wearer, the length of the web being substantially equal to the combined width of said elements thereby providing a common surface against which the elements may be folded in side by side relation with the web forming a covering on one side thereof, said casing being constructed of fabric and substantially the size of the folded life belt, means for closing the casing thereby constraining the belt and forming a cushion, and means for opening the casing.

2,310,841
DEVICE FOR FABRICATING PUMP IMPELLERS
William H. Curtis, Dayton, Ohio, assignor to Curtis Pump Company, Dayton, Ohio, a corporation of Ohio
Application August 17, 1940, Serial No. 353,015
1 Claim. (Cl. 113—99)



A device for insertion in a furnace to hold members to be brazed in cooperable relation to each other and to automatically move said members into intimate relation during brazing in the furnace, said device comprising a base adapted to guidingly receive and support an impeller body seated thereon, a weighted jig member disposed above said base and having spaced-apart means on its lower face adapted to guidingly

receive impeller vanes disposed therebetween, shaft means on said base member and extending thereabove and guidingly entered in said jig member, said jig member and the vanes held thereby being normally spaced from said base by a normally rigid brazing shim interposed between an opposed edge of said vanes and said impeller body, means on said shaft and engaging said jig member to fixedly retain the jig member, the vanes, the shim, the impeller body, and the base in assembled relation for initial insertion of the assembly in a furnace, and means comprising said weighted jig member movable to move opposed edges of the vanes into intimate contact with the impeller body as the shim melts under the influence of the heat of the furnace.

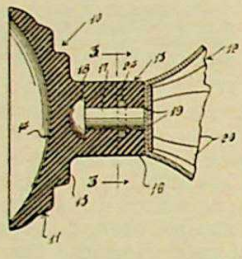
2,310,842

TIEBACK HOLDER

Margaret Mary May Davitt and Jane E. May Wendell, Rensselaer, N. Y.

Application July 24, 1941, Serial No. 403,908

6 Claims. (Cl. 24—73)



1. A tieback holder for curtains or drapes comprising in combination with a suction cup provided with an integral shank projecting from the convex side thereof, a strand of wire bent upon itself intermediate of its ends, the legs of said strand projecting from the intermediate portion thereof in diverging relationship to one another, one of said legs being embedded in and anchored to said shank, and the other of said legs being spaced from the shank.

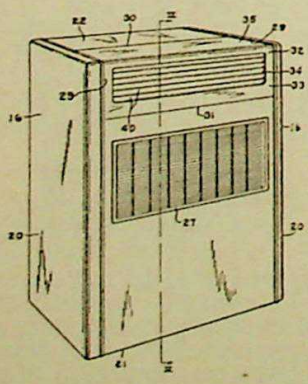
2,310,843

AIR CONDITIONING APPARATUS

John L. Ditzler, Springfield, Mass., assignor to Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa., a corporation of Pennsylvania

Application June 20, 1941, Serial No. 398,869

7 Claims. (Cl. 62—129)



1. In an air conditioning unit, the combination of an evaporator, a blower for circulating air over said evaporator, a substantially rectangular cabinet enclosing said evaporator and said blower, said cabinet having substantially equal sized adjoining openings in the front and top sides thereof, said openings being on the discharge side of said evaporator, a separate substantially right angular corner piece including an imperforate portion and a portion having an air discharge opening therein, said portions of said corner piece being substantially equal in size and corresponding approximately in size to said openings in said cabinet, means for retaining said corner piece in first and second positions on said cabinet, said first position being such that the imperforate portion closes the opening in the top of the cabinet and the portion having the discharge opening therein is adjacent the opening in the front of the cabinet so as to cause the air passed over the evaporator to be discharged from the front of the cabinet, said second position being such that the imperforate portion closes the opening in the front of the cabinet and the portion having the discharge opening therein is adjacent the opening in the top of the cabinet so as to cause the air passed over the evaporator to be discharged from the top of the cabinet.

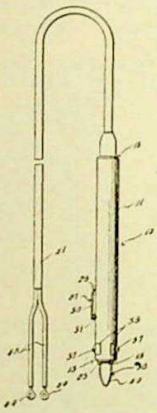
2,310,844

ELECTRIC KNIFE WITH CHANGEABLE POINTS

Walter A. Draeger, Dawson, N. Dak.

Application April 9, 1941, Serial No. 387,732

1 Claim. (Cl. 128—303.14)



An electric knife comprising a holder of insulating material provided with spaced longitudinally extending bores, electrical conductors disposed in the bores and opening outwardly of an end of the holder, said conductors having longitudinally extending recesses which open outwardly of corresponding ends thereof and which open outwardly of said end of the holder, said conductors also having recesses which communicate with the first mentioned recesses and which open laterally outwardly of the conductors, said holder having recesses which communicate with the last mentioned recesses of the conductors, inserts anchored in the last mentioned recesses of the conductors and the recesses of the holder for retaining the conductors in position in the holder, said inserts and the recesses in which they are received being shaped to retain the inserts therein, a knife point formed from a strand of wire, the ends of the strand being disposed in the longitudinal recesses of the conductors, said inserts having threaded openings extending therethrough, and set screws engaging the threaded openings and releasably engaging the ends of the strand for securely connecting the knife point to the conductors.

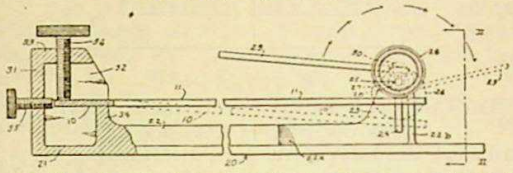
2,310,845

METHOD OF DETERMINING THE MAGNITUDE OF STRAINS IN RIGID ARTICLES

Greer Ellis, Cambridge, Mass., assignor to Magnaflux Corporation, Chicago, Ill., a corporation of Delaware

Application October 3, 1940, Serial No. 359,607

8 Claims. (Cl. 73—51)



1. Method of determining strain values in a rigid article comprising coating said rigid article and another rigid article with like uniformly brittle films, subjecting said second rigid article to known strains that vary as between different areas thereon to form over said areas crack patterns typical of the known strain value obtaining over each area, subjecting said first rigid article to strains sufficient to induce cracking of the film coating said second article, and matching crack patterns in said first article with crack patterns in said second article typical of known strain values, thereby estimating the magnitude of the strains effecting the crack patterns in said first article.

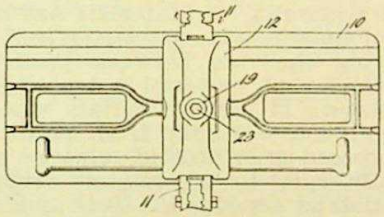
2,310,846

TRACTION DEVICE

Camille P. Galanot, Alliance, Ohio, and James A. Watson, Jr., Silver Spring, Md.

Application August 20, 1941, Serial No. 407,635

8 Claims. (Cl. 305—10)



1. In a device of the character described, in combination, a belt, a traction shoe, a hollow guide block, and means for securing said belt, traction shoe and guide block together and for adjusting the relationship of said belt and said traction shoe, said last means comprising a threaded member rotatably mounted in said guide block and traction shoe and having threaded engagement with said belt, means preventing substantial longitudinal movement of said threaded member, and means for preventing accidental rotation of said threaded member, said threaded member having a tool engaging surface.

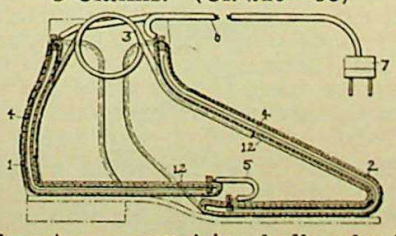
2,310,847

SHOE TREE

Ernst Grau-Küpfer, Kerzers, Switzerland

Application September 12, 1941, Serial No. 410,524

3 Claims. (Cl. 219—38)



1. A shoe tree comprising hollow heel and toe sections adapted to fit the shoe, resilient means for joining said sections and for forcing them into contact with the interior of the shoe, means for permitting heating the interior of said sections adapted to radiate heat equally from all parts of the sections, and heat insulation on those parts of the sections which are not in contact with the shoe.

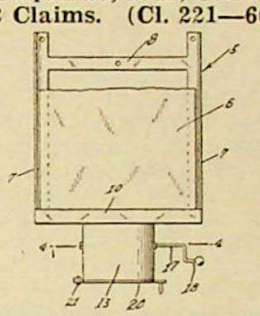
2,310,848

DISPENSER

George W. Glann, Sioux City, Iowa

Application April 25, 1941, Serial No. 390,390

2 Claims. (Cl. 221—66)



1. Means for dispensing materials contained in cans provided with discharging necks, comprising a horizontal frame composed of four members each of angle shape in cross section to provide a frame with an inwardly extending horizontal flange and an upwardly extending vertical flange, a pair of uprights connected at their lower ends to the rear corners of the frame and each upright being of angle shape in cross section, a plate seated in the frame, a depending spout at the center of the plate for receiving the neck of a can which is placed in inverted position on the plate and having portions between the uprights, a shaft passing through the spout, an agitator in the spout connected with the shaft and a closure for the lower end of the spout.

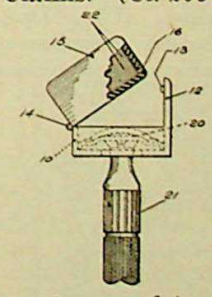
2,310,849

SAFETY RAZOR CONTAINER

George A. Graham, Boston, Mass., assignor to Gillette Safety Razor Company, Boston, Mass., a corporation of Delaware

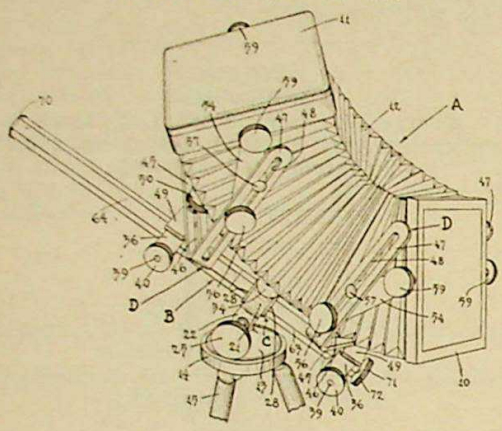
Application December 20, 1940, Serial No. 370,993

2 Claims. (Cl. 206—16)



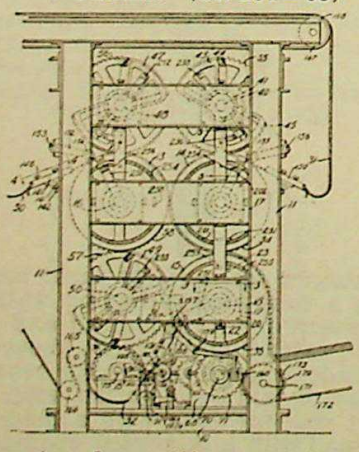
1. A container for a safety razor and blades, comprising a base section having walls providing an enclosure for a razor head and including a front wall extending upwardly above its other walls, a blade box hinged at its rear edge to the top edge of said base section, said box having a front wall provided with a blade-exit slit and a top wall with a restricted opening, whereby blades within the said box may be reached from above, the said box being swingable substantially into engagement with a razor head located in the enclosure and into engagement with said extended front wall, said extended front wall being sufficiently extended to cover said blade-exit slit.

2,310,850
CAMERA
Garrison P. Grover, Minneapolis, Minn., assignor to Burke & James, Inc., a corporation of Illinois
Application June 16, 1941, Serial No. 398,273
19 Claims. (Cl. 95—50)



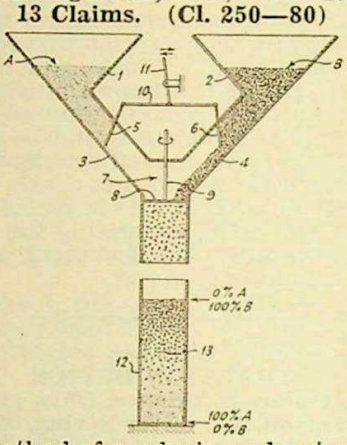
1. In a camera having a body comprising front and back members and a bellows therebetween, a base member, a bed rail longitudinally and angularly adjustable on said base member, supports, one for each of said camera members, said supports being mounted on said bed rail and each thereof being adjustable to alter the disposition of its respective camera member, relative to the bed rail, through rectilinear movements of such member, advancing, retracting, elevating, lowering, and sidewise shifting the same and, through swinging movements of such member, tilting the same and also swiveling it sidewise, and means individual to the said supports for centering them with respect to the bed rail.

2,310,851
APPARATUS FOR MAKING LAMINATED STRIPS
Urban C. Haren, Akron, and John P. Sapp, Kent, Ohio, assignors to The B. F. Goodrich Company, New York, N. Y., a corporation of New York
Application November 7, 1940, Serial No. 364,664
9 Claims. (Cl. 164—68)



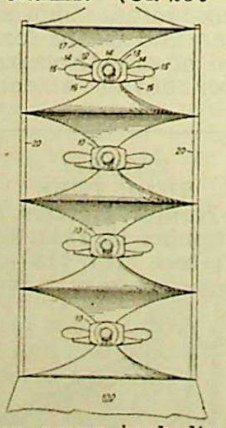
8. Apparatus for cutting a strip of material, said apparatus comprising a rotatable platen for progressively advancing strip material past a cutting station to an assembling station, driving means for continuously rotating said platen, means at the cutting station for severing the strip material as it is advanced, clamping means adjacent the platen for clamping material against the platen, a rotatable support for said clamping means, locking means carried by said support for locking said support to said platen for rotative movement therewith, means at said assembling station for releasing said clamping means from the strip material, and means at the cutting station for releasing said locking means and stopping rotation of said support.

2,310,852
LUMINESCENT LIGHT SOURCE AND METHOD OF MANUFACTURE
Humboldt W. Leverenz, South Orange, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application August 21, 1940, Serial No. 353,461
13 Claims. (Cl. 250—80)



1. The method of producing a luminescent material mixture which comprises simultaneously depositing a plurality of materials having different spectral emission characteristics and continuously varying the rate between predetermined limits at which each material is deposited to produce a mixture of said materials whereby the spectral emission will vary from point to point over an exposed area of said mixture at a rate substantially equal to the rate at which one of said materials is deposited.

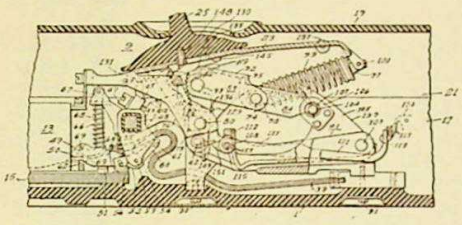
2,310,853
ANTENNA
Nils E. Lindenblad, Rocky Point, N. Y., assignor to Radio Corporation of America, a corporation of Delaware
Application December 20, 1941, Serial No. 423,748
15 Claims. (Cl. 250—11)



1. An antenna array including a plurality of turnstile antennas arranged along a common vertical axis, means for energizing said antennas in the same phase relationship from a source of high

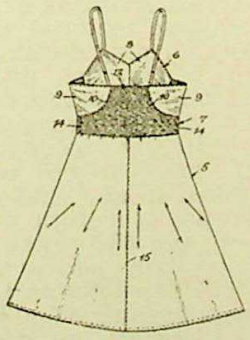
frequency energy and means associated with said antennas for preventing the energy radiated thereby from combining in an out of phase relationship within a narrow angle including a line normal to said axis.

2,310,854
CIRCUIT BREAKER
Ture Lindstrom, Edgewood, and Jerome Sandin, Forest Hills, Pa., assignors to Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa., a corporation of Pennsylvania
Application July 10, 1941, Serial No. 401,690
12 Claims. (Cl. 200—89)



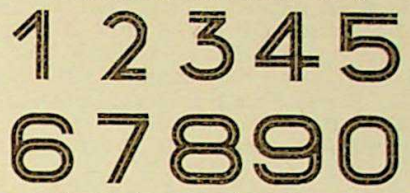
1. A circuit breaker comprising relatively movable contacts, operating mechanism therefor including an operating member movable to open and to close said contacts, a member movable in response to predetermined abnormal conditions in the circuit to cause automatic opening of the contacts irrespective of the position of said operating member, said mechanism being resettable following automatic opening of said contacts, and latch means pivoted on a fixed support and operable to lock said contacts open upon automatic opening thereof while the operating member is held in closed position and until after said mechanism has been reset.

2,310,855
GARMENT
Rose Manson, New York, N. Y.
Application April 15, 1941, Serial No. 388,606
2 Claims. (Cl. 2—73)



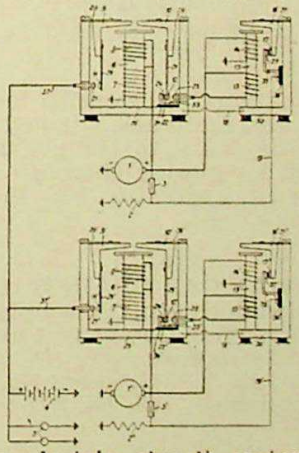
1. A garment comprising a body portion made of inelastic material, a brassière portion comprising breast pockets made of inelastic material, and having extensions made of inelastic material attached to the side edges thereof and extending to the rear of the garment, the ends of the extensions being spaced apart at the rear of the garment, and a midriff portion connected between the upper edge of the skirt and the lower edge of the brassière portion and extending upwardly to the top of the garment adjacent the center of the rear thereof, the said midriff portion being made of elastic material.

2,310,856
NUMERAL TYPE FACE
Michael Maul, Berlin-Johannisthal, Germany; vested in the Alien Property Custodian
Application February 4, 1939, Serial No. 254,524
In Germany February 7, 1938
2 Claims. (Cl. 101—399)



1. Type elements adapted for use with type carriers of a printing device comprising a set of type adapted upon operation of the device to print characters of the numeral series 0 through 9, the portion of the type forming the character lines being of constant width but with different type elements having different middle-line lengths whereby the type elements differ from each other in their areas, the element 8 having the longest and the element 1 having the shortest middle-line with the remaining elements being provided with middle-line lengths between those of the 1 and 8 in substantially equally graduated steps independently of the numerical value of the elements.

2,310,857
ELECTRIC REGULATING SYSTEM
Friedrich Menzel, Stuttgart, Germany; vested in the Alien Property Custodian
Original application March 22, 1939, Serial No. 263,496. Divided and this application October 3, 1941, Serial No. 413,535. In Germany April 4, 1938
7 Claims. (Cl. 171—312)



1. In an electric circuit system, a common consuming circuit, two generators parallel connected to said common consuming circuit and, associated to each generator, first means adapted to make and break connection between their generator and said common consuming circuit and tending to prevent return currents from said consuming circuit by breaking said connection, second means adapted to regulate their generator for production of a substantially constant voltage until reaching a predetermined maximum current through said first means and further adapted to regulate their generator for production of a rapidly decreasing voltage as said maximum current is exceeded, and third means adapted to respond to the return currents flowing into their associated generator from the parallel generator, by influencing their as-

sociated second means in a manner to regulate their generator to an increased voltage, for precluding breaking action of said first means as a result of slight voltage differences between the two generators.

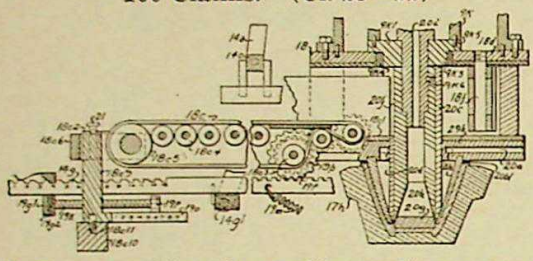
2,310,858

METHOD AND APPARATUS FOR THE MANUFACTURE OF POTTERY WARE

William J. Miller, Swissvale, Pa.

Original application November 4, 1931, Serial No. 573,017. Divided and this application November 2, 1935, Serial No. 47,990

100 Claims. (Cl. 25—22)



3. In a machine for making pottery ware the combination which comprises, a porous mold, a mold support, a conveyor adapted to support an elongated slug of clay, means for advancing said slug stepwise towards the mold, means for cutting and compressing gobs from said slug, and means for feeding said gobs onto the porous mold.

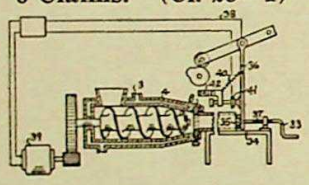
2,310,859

MANUFACTURE OF POTTERY WARE

William J. Miller, Swissvale, Pa.

Application April 6, 1940, Serial No. 328,365

6 Claims. (Cl. 25—1)



6. In combination, an extrusion machine and a tubular refillable receptacle adapted to be filled with clay at the nozzle of the pug mill, and a detachable cap for closing the open end of the receptacle when in association with the plug mill, said cap having a vent.

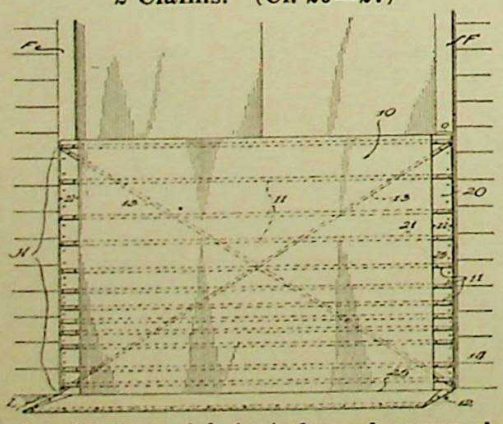
2,310,860

RAILWAY CAR GRAIN DOOR

John M. Moon, Middletown, Ohio, assignor to Signode Steel Strapping Company, Chicago, Ill., a corporation of Delaware

Application July 2, 1941, Serial No. 400,740

2 Claims. (Cl. 20—27)



1. A unitary prefabricated car doorway closure bulkhead comprising a closure panel of a size transversely to bridge the doorway and overlie the side frames thereof and consisting of two superimposed and pasted together plies of fabric, and a plurality of horizontally spaced perforated metallic straps extending transversely across the panel between plies and in positions fixed by the adhesion of the plies to each other, one of the plies being transversely short of the other ply along both vertical edges of the panel so as to expose certain perforations in the opposite ends of the straps to facilitate attachment thereof to the doorway side frames.

2,310,861

METHOD OF MAKING ELECTROLYTE PASTE

Richard Müller and Harry Lee, Radebeul, near Dresden, Germany; vested in the Alien Property Custodian

No Drawing. Application June 8, 1940, Serial No. 339,526. In Germany June 7, 1939

2 Claims. (Cl. 136—158)

1. Method for preparing an electrolyte paste for a dry cell which is free of air, comprising displacing the contents of air of the gelatinizing agent by placing it under an atmosphere of an inert gas, mixing the agent with an electrolyte and passing an inert, water-insoluble gas through the mixture.

2,310,862

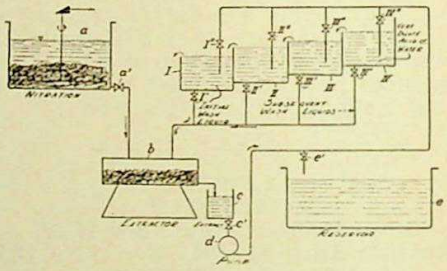
METHOD OF WASHING NITROCELLULOSE TO RECOVER NITRATING ACIDS

Friedrich Nessler, Walsrode, Germany; vested in the Alien Property Custodian

Application June 13, 1939, Serial No. 278,926

In Germany June 13, 1938

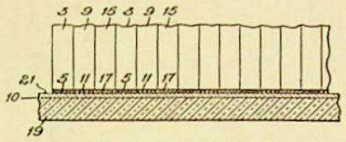
1 Claim. (Cl. 260—224)



In a process for removing and substantially recovering concentrated nitrating acid still adhering to a nitrocellulose material after nitration while substantially avoiding decomposition of the nitrocellulose in which the nitrocellulose is washed step by step with separate volumes of acid washing liquids of decreasing concentration, the steps comprising initially washing said material with a relatively large volume of an aqueous washing liquid taken from a first container and comprising a mixture of sulfuric acid and nitric acid of not more than 65% total acid contents but which is substantially not less than 50% concentration to avoid decomposing the nitrocellulose, recovering said washing liquid having an acid concentration greater than that before use, thereafter washing said material with a second volume of aqueous washing liquid taken from a second container and comprising a mixture of sulfuric acid and nitric acid of acid concentration less than that of washing liquid first used, returning the increased volume of washing liquid obtained as a result of said second washing operation to said second container, thereby displacing from said second container an equivalent volume of such increased washing liquid and removing such displaced liquid to said first container, thus recovering individual volumes of washing liquids of increased acid concentration, and repeating such washing operations with liquid of decreas-

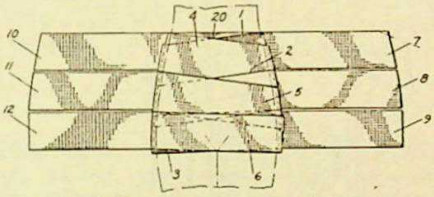
ing concentration to produce a nitrocellulose material substantially free of adhering acid, which nitrocellulose is substantially undecomposed.

2,310,863
LUMINESCENT SCREEN
Humboldt W. Leverenz, South Orange, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application January 25, 1941, Serial No. 375,906
6 Claims. (Cl. 250—80)



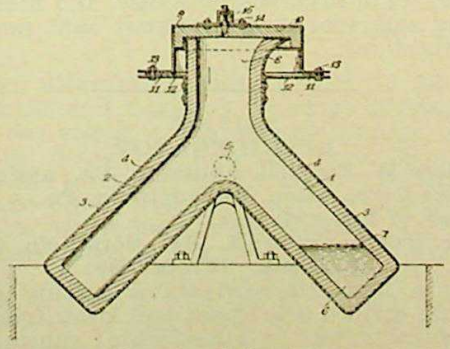
3. The steps in the method of preparing a luminescent screen which comprises coating a support surface with a binder, stacking together a plurality of plates having luminescent material deposited on at least one edge of each plate, and impressing said luminescent material upon the binder coated on the support member.

2,310,864
SURGICAL BANDAGE
Laura M. Pegg, Detroit, Mich.
Application July 8, 1941, Serial No. 401,498
2 Claims. (Cl. 128—155)



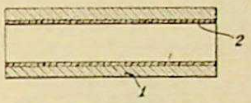
1. A surgical bandage comprising two corresponding thicknesses of bandage fabric in elongate form, said thicknesses secured together intermediate their ends forming a back section, said thicknesses not being secured together throughout their end portions, each thickness of each end portion divided into a plurality of strips extending outwardly from the back section and having a length substantially equal thereto and having in the aggregate a width substantially equal thereto.

2,310,865
PROCESS FOR EFFECTING METALLURGICAL REACTIONS REGULARLY AND RAPIDLY
René Perrin, Paris, France; vested in the Alien Property Custodian
Application March 23, 1938, Serial No. 197,725
In France March 26, 1937
1 Claim. (Cl. 75—54)



In a process for desulphurising and dephosphorising cast iron by means of a basic oxidising slag, the steps of operating in a closed apparatus so as to let the pressure rise to the value at which the oxidation reaction of the carbon of the cast iron by the oxygen of the slag stops.

2,310,866
LUMINESCENT TUBE
Earle C. Pitman, Red Bank, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a corporation of Delaware
Application February 25, 1941, Serial No. 380,455
11 Claims. (Cl. 176—122)

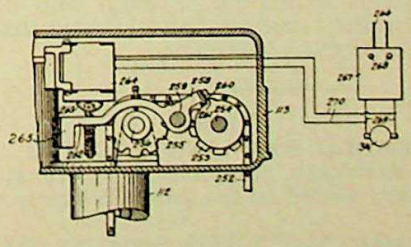


1. A coating composition adapted to depositing a thin uniform film in luminescent light tubes comprising a liquid vehicle containing dynamite cellulose nitrate as an essential ingredient, a solvent therefor and a suspension therein of a luminescent material said cellulose nitrate having received no treatment for substantially reducing its viscosity characteristic.

2,310,867
COATING COMPOSITION
Earle C. Pitman, Red Bank, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a corporation of Delaware
No Drawing. Application February 25, 1941, Serial No. 380,456
6 Claims. (Cl. 106—195)

1. An improved coating composition adapted for dipping comprising a plurality of film-forming ingredients one of which is dynamite type cellulose nitrate as an essential ingredient, and a liquid volatile vehicle containing at least one active solvent for the film-forming ingredients, the said dynamite type cellulose nitrate being present in amount less than 3 per cent of the total composition.

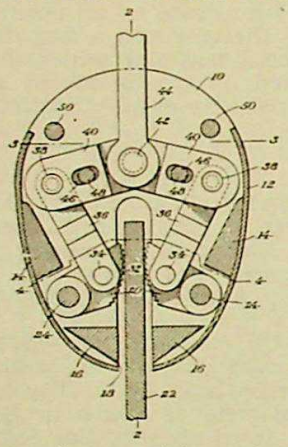
2,310,868
MACHINE FOR APPLYING HOOD CAPS
John F. Price, Fulton, N. Y., assignor to Oswego Falls Corporation, Fulton, N. Y., a corporation of New York
Application July 17, 1940, Serial No. 346,014
10 Claims. (Cl. 226—83)



1. A machine for applying hood caps to bottles, the skirts of which caps are provided with a substance rendered adhesive by the application of heat; comprising a frame, bottle advancing means operable to advance uncapped bottles to a capping station, means for supporting a supply of caps, a cap heating device arranged intermediate said supply and said capping station, cap advancing means operable to advance caps from said supply to said capping station and during such advancement to succes-

sively position said caps in heat exchanging relation to said cap heating device, a motor operatively connected to said bottle and cap advancing means and operable to actuate the same, said cap heating device being movable out of heat exchanging relation to said caps, latch mechanism operable to hold said device in heat exchanging relation to said caps, and electro-responsive means energized concurrently with said motor and operable when energized to maintain said latch in holding position, said electro-responsive means being also operable upon interruption of the current to said motor to release said latch, and means operable to move said cap heating device out of heat exchanging position upon release of said latch.

2,310,869
GRAB
Joseph J. Racz, Charleston, S. C.
Application April 13, 1942, Serial No. 438,826
5 Claims. (Cl. 294—114)



1. A lifting grab comprising a housing having two spaced walls, connecting walls secured to the spaced walls at their perimeters, said spaced walls each having a slot passing through an edge thereof and said connecting walls being spaced at the slots for the entrance of work to be lifted, said connecting walls being spaced one from the other opposite the slots to provide an opening in the housing, opposed work-grabbing jaws pivoted to the spaced walls to pivot across the slots for engagement with the work, first links pivoted intermediate their ends on the spaced walls, second links each having a pivotal connection with one end of one first link and with one jaw, and lifting means extending through said opening and having the remaining ends of said first links pivotally connected therewith

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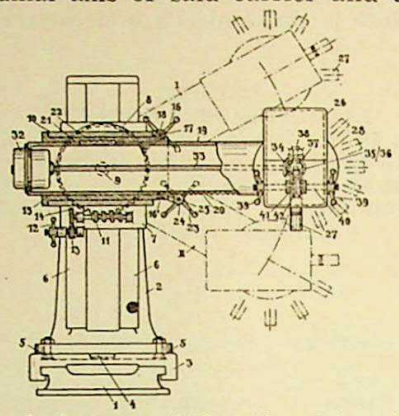
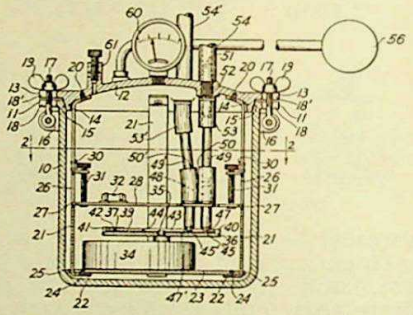
2,310,870
RADIAL DRILLING MACHINE
Valentin Retterath, Iversheim, near Munstereifel, Germany; vested in the Alien Property Custodian
Application April 8, 1940, Serial No. 328,541
In Germany April 15, 1939
5 Claims. (Cl. 77—28)

1. A radial drilling machine comprising a longitudinally adjustable standard rotatable about its longitudinal axis, a tubular carrier mounted for longitudinal movement on said standard, a drill spindle housing oscillatably and rotatably arranged at an end of said carrier, a drive motor mounted in one end of said tubular carrier, a motor shaft therefor coinciding with the longitudinal axis of said carrier, a drill spindle, a drive shaft therefor disposed perpendicularly to the longitudinal axis of said carrier and an inter-



mediate shaft transmitting the drive from said motor shaft to said drill spindle drive shaft.

2,310,871
METHOD AND APPARATUS FOR STUDYING THE POLLUTION OF ATMOSPHERES
Alfred C. Robertson, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey
Application April 7, 1939, Serial No. 266,586
12 Claims. (Cl. 73—51)

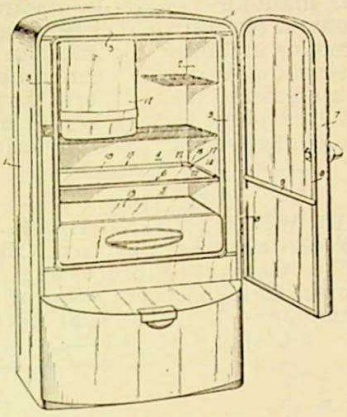


1. An apparatus for determining the amount of solid material polluting an atmosphere comprising an air-tight chamber, a table movably mounted therein, a record disc on said table, and having an impregnable, non-tacky, surface, a nozzle in said chamber with its orifice adjacent said surface of the recording disc and its entrance in communication with said atmosphere to be measured, means for evacuating said chamber to obtain and maintain a pressure drop through said nozzle equal to, or greater than, .53 of the pressure of said atmosphere; whereby said atmosphere is caused to flow through said nozzle at the velocity of sound through said atmosphere to be impinged against said surface of the recording disc with such force that the solid material contained therein is impregnated into the surface of said recording disc, and means for moving said recording disc past said nozzle at a constant rate.

2,310,872
REFRIGERATOR
Theodore W. Rundell, Abington, Pa., assignor to Philco Corporation, Philadelphia, Pa., a corporation of Pennsylvania
Application November 6, 1941, Serial No. 418,082
8 Claims. (Cl. 62—89)

1. In a domestic refrigerator having a food liner sub-divided into upper and lower food storage compartments by a horizontal substantially imperforate slidably mounted partition of less

depth than said food liner to provide a vent at the rear of said partition for the circulation of air between said upper and lower compartments, a member for closing the vent pivotally mounted in the food liner and having a substantially imperforate body portion arranged when the member is in one position substantially to close said vent and in another position thereof to leave the vent substantially unobstructed, means



at the forward edge of said member arranged for engagement by the rear edge of the partition when the member is in vent closing position thereby to secure said member in closed position, and means projecting from the body portion of the member arranged to engage under the partition rear edge when said member is in open vent position thereby to secure the member in open position

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2,310,873

QUATERNARY AMMONIUM COMPOUND

John Carl Sauer, Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application November 4, 1940, Serial No. 364,331

2 Claims. (Cl. 260—295)

1. Hexane - bis(N - octadecylamidomethylene - pyridinium chloride).

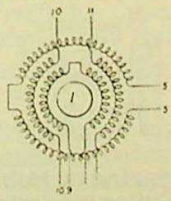
2,310,874

VARIABLE SPEED MOTOR

Martin Schiff, St. Louis County, Mo., assignor to Century Electric Company, St. Louis, Mo., a corporation of Missouri

Application July 11, 1940, Serial No. 344,850

5 Claims. (Cl. 172—278)



2. In an alternating current motor, a rotor, a stator, main and auxiliary windings disposed in slots in the stator, the auxiliary winding being electrically displaced in phase from the main winding, the main winding being divided into at least three parts, two of which are equal, said equal parts of the main winding being each uniformly distributed in symmetrical sections of the stator slots and the third part of the main winding being uniformly and symmetrically distributed in the same stator slots as said equal parts, and switch means for connecting the line voltage across the said third part of the main winding, and connecting the entire main winding including the two equal parts in series across the auxiliary winding whereby the main winding acts as an auto-transformer supplying a voltage to the auxiliary winding higher than the line voltage, said switch being arranged so all parts of the main winding are energized when the motor is in operation.

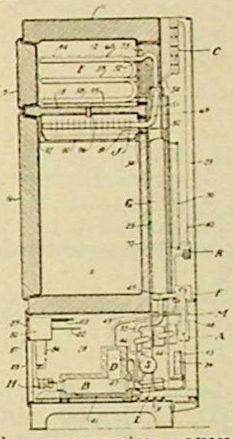
2,310,875

REFRIGERATION

Arnold D. Siedle, Canton, Ohio, assignor to The Hoover Company, North Canton, Ohio, a corporation of Ohio

Application December 31, 1938, Serial No. 248,699

20 Claims. (Cl. 62—119.5)



7. Refrigerating apparatus comprising an evaporator having an air-cooling section and a superposed freezing section, means connecting said sections for conducting inert gas therebetween, means for supplying inert gas to said air-cooling section for circulation upwardly through said sections, means for supplying refrigerant liquid to said freezing section and means for conveying unevaporated refrigerant from said freezing section into said cooling section.

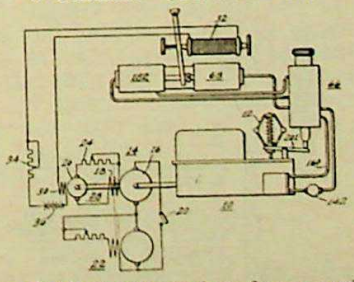
2,310,876

REGULATING APPARATUS

Walter H. Smith, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa., a corporation of Pennsylvania

Application May 20, 1942, Serial No. 443,686

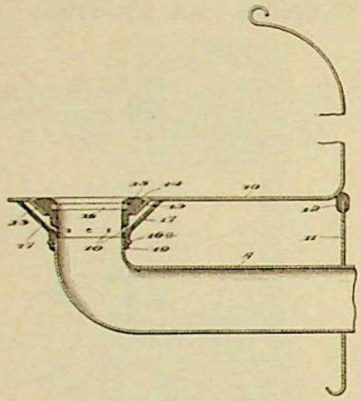
5 Claims. (Cl. 290—17)



1. In regulating apparatus for constant speed engines, in combination, a generator provided with an armature winding and a field winding disposed to be driven by the engine, means for energizing the field winding of the generator, a rheostat connected in circuit relation with the energizing means disposed to be operated for controlling the voltage generated by the generator, a pressure responsive means disposed for operating the rheostat, a power piston disposed to operate the pressure responsive means, a control

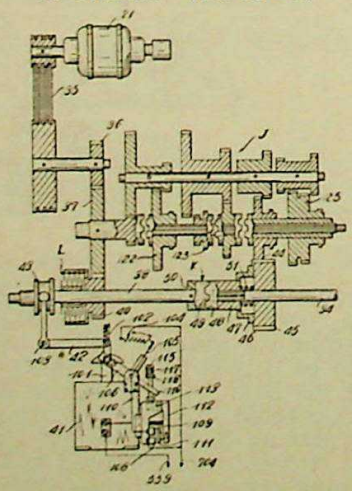
valve responsive to the speed of the engine for effecting the operation of the power piston, and means responsive to the operation of the power piston disposed to operate the control valve to effect the intermittent operation of the power piston to give a step-by-step operation of the rheostat to prevent over control of the excitation of the generator and maintain the speed of the engine substantially constant under changing load conditions.

2,310,877
OUTLET CONNECTOR FOR TANKS
Pierce Sperry, Middlefield, Ohio
Application September 23, 1941, Serial No. 412,043
3 Claims. (Cl. 285—90)



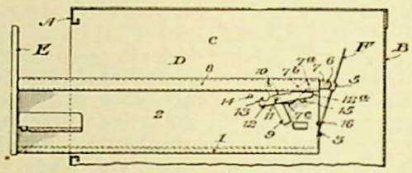
1. In a connector for attachment to flanged outlets of tanks, a flexible tubular connector member adapted to be collapsed and inserted within the outlet, flanges on the tubular member adapted to expand from collapsed condition to open condition with the flanges in gripped, sealed contact with both sides of the tank outlet flange, an inner recess in one of the connector flanges accessible from inside of the tank, and an expansion ring adapted to be collapsed and inserted within the recess to lock the flanges in sealing contact with the tank outlet flange when expanded.

2,310,878
MACHINE TOOL
Hallis N. Stephan, Cleveland Heights, Ohio, assignor, by mesne assignments, to The Lucas Machine Tool Company, Bratenahl, Ohio, a corporation of Ohio
Application June 12, 1940, Serial No. 340,143
11 Claims. (Cl. 77—3)



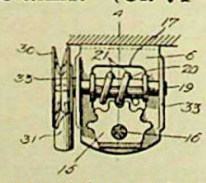
11. In a machine tool or the like, the combination of a frame, a pendant control station supported by said frame, a tool supporting member, a work supporting member, means for movably supporting one of said members on said frame for movement relative to said frame, power means including an engageable and disengageable drive connection comprising a slidable member for moving said movable supported member relative to said frame, means including a solenoid for moving said slidable member to engage said drive connection, manually operable means on said pendant control station for energizing said solenoid, and means including mechanism responsive to the movement of said slidable member for automatically increasing the ampere turns of said solenoid as said slidable member is moved in a direction to engage said drive connection.

2,310,879
DRAWER WITH TILTING BACK WALL
Clarence W. Straubel, Youngstown, Ohio, assignor to The General Fireproofing Company, Youngstown, Ohio, a corporation of Ohio
Application June 6, 1941, Serial No. 396,956
9 Claims. (Cl. 45—2)



1. In a filing cabinet having side and rear walls, the combination including a drawer mounted for sliding movement in the cabinet and having side and bottom walls, a back wall hinged on a fixed transverse axis to the rear of the drawer body and movable from a vertical position when the drawer is closed to a rearwardly inclined position when the drawer is open, cooperating means on a side wall of the drawer and the back wall for limiting angular movement of the back wall, and means on a wall of the cabinet cooperating with said last named means to hold said back wall vertically locked to the drawer and out of engagement with the rear wall of the cabinet when the drawer is closed.

2,310,880
WORM
Walter J. Stuber and John J. Di Ienno, Philadelphia, Pa., assignors to Carey McFall Company, Philadelphia, Pa., a corporation of Pennsylvania
Application May 9, 1942, Serial No. 442,316
8 Claims. (Cl. 74—458)

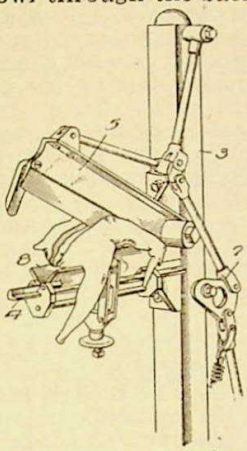


1. A worm comprising a hub, and a series of spring wire convolutions frictionally embracing said hub by reactionary dynamic torsional force inherently exerted on said hub circumferentially thereof by said convolutions.

2,310,881
METHOD FOR DRESSING POULTRY
Levi George Swanson, Perry, Iowa
Original application December 29, 1937, Serial No. 183,284. Divided and this application March 22, 1939, Serial No. 263,536
2 Claims. (Cl. 17—45)

1. The method of dressing and bisecting fowl

consisting in suspending the fowl in a position to space the viscera from the back of the fowl, incising the fowl through the back, without con-



tact with the viscera, permitting the viscera to be removed intact, and incising the fowl through the breast, after evisceration, to bisect the fowl.

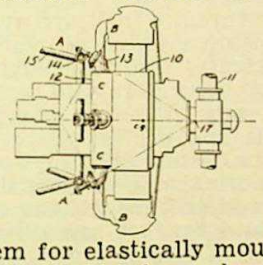
2,310,882

RESILIENT ENGINE MOUNT

Edward Story Taylor, Cambridge, Mass., assignor to Wright Aeronautical Corporation, a corporation of New York

Application November 13, 1939, Serial No. 303,993

6 Claims. (Cl. 248—5)



3. In a system for elastically mounting an engine member on a support member spaced from the engine center of gravity, a plurality of mounting units between the engine and support and spaced apart one from the other; each unit comprising a pedestal secured to one member and having a flattened cavity the predominant plane of which is sloped to intersect the engine axis on the opposite side of the mounting plane from the engine, a plate within said cavity and similarly sloped, means to secure said plate to the other member, and resilient rollers of rubber or the like compressed between the opposed flattened surfaces of the pedestal cavity and plate.

2,310,883

CIRCUIT ARRANGEMENT WITH SECONDARY EMISSION ELECTRON MULTIPLIERS

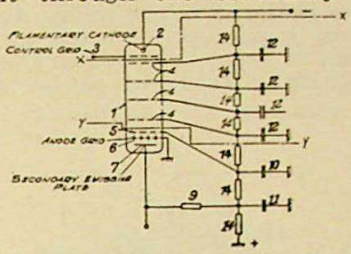
Kurt Thöm, Berlin-Lichterfelde, Germany; vested in the Alien Property Custodian

Application July 16, 1940, Serial No. 345,823

In Germany July 20, 1939

7 Claims. (Cl. 250—27)

1. A circuit arrangement including a secondary emission electron multiplier having a cathode, an anode and a plurality of secondary emissive electrodes, means for controlling the electron current in said multiplier, a source of direct current potential, a potential divider connected across said source, a plurality of said secondary emissive electrodes being connected to points of said potential divider and to ground by way of condensers, the condenser connected to the secondary emission electrode adjacent to said anode being so dimensioned that the potential of this electrode is kept substantially constant when the current through the secondary emission



multiplier is increased to its maximal value for a short period of time less than the time between the occurrences of maximal values of electron emission from the primary cathode to the adjacent secondary emission electrode.

2,310,884

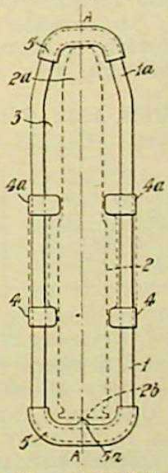
CHUTE FOR AMMUNITION AND OTHER ARTICLES

Henry Trevaskis, Hampton Lane, Solihull, England, assignor to Dunlop Rubber Company Limited, London County, England, a British company

Application September 2, 1942, Serial No. 457,007

In Great Britain April 18, 1941

4 Claims. (Cl. 89—33)



1. A flexible chute comprising a series of metal frames in approximately parallel spaced planes and in approximate alignment, said frames comprising two longer sides connected at their opposite ends and lengths of rubber extending longitudinally of said series and secured to said frames at the ends thereof and a pair of lengths of rubber of greater hardness secured to the longer side of said frames between the ends thereof to form continuous guiding surfaces for ammunition passing through said series of frames.

2,310,885

DOUBLE BEAD BARREL HEAD

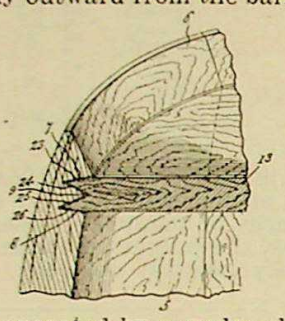
William H. Veeneman, Louisville, Ky., assignor to Frankfort Distilleries, Incorporated, Louisville, Ky., a corporation of West Virginia

Application May 3, 1941, Serial No. 391,797

1 Claim. (Cl. 217—80)

A barrel construction comprising a barrel body having a croze comprised of annular recesses of substantially wedge form in cross-section with the apexes directed radially outward from the barrel axis, a wedge ring of wedge cross sectional form having its apex directed inwardly of the

barrel axis and dividing the major portions of said recesses, the altitude of the triangular wedge ring being less than the altitudes of the triangular recesses to permit the recesses to communicate across the apex of the wedge ring, a barrel head having a plurality of beads each being of wedge form in cross section with the apices directed radially outward from the barrel axis said



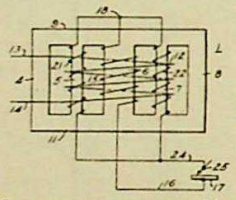
beads being separated by a wedge-shaped recess adapted to receive the wedge ring of the barrel body while the beads occupy the recesses of the barrel body, said croze recesses and said beads mutually interfitting loosely to provide a four-zone zig-zag path of substantial length and narrow depth to receive linings of sealing material.

2,310,886

WELDING TRANSFORMER

Edward C. Wentz, Sharpsville, Pa., assignor to Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa., a corporation of Pennsylvania

Application April 29, 1942, Serial No. 440,957
11 Claims. (Cl. 171—119)



1. In a transformer, a magnetic core structure having five leg members all connected at their ends by two yoke members, main primary and secondary windings inductively related to said core, one of said main windings surrounding three of said leg members, the other of said main windings surrounding one only of said leg members, and two auxiliary windings surrounding the other two of said three winding leg members, the auxiliary windings being connected in parallel circuit with each other and so connected in series circuit with the above named winding surrounding one winding leg only that the voltages of the parallel connected windings are in opposition to the voltage of the main winding surrounding one winding leg only.

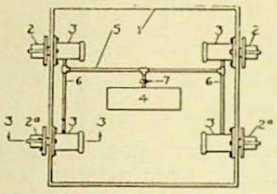
2,310,887

HOOK-ON-AND-RELEASE MECHANISM FOR FIGHTING TANKS

Alfred E. Andersen, Brooklyn, N. Y., assignor to Armored Tank Corporation, New York, N. Y., a corporation of New York

Application May 6, 1941, Serial No. 392,047
4 Claims. (Cl. 89—1)

1. A hook-on-and-release mechanism for suspending a fighting tank from an airplane comprising a pair of brackets depending from the airplane adjacent opposite sides of said tank, registering apertures in the walls of said tank and in said brackets, an open ended fluid pressure cylinder having said open end secured to the inner side of the tank wall at each said aperture therein, a piston within said cylinder having a piston stem extending from opposite sides of the piston, resilient means at one side of each said piston normally holding the piston stem at the opposite side of the piston in engagement with the adjacent registering tank wall and bracket apertures, a source of fluid pressure within said tank, supply lines connecting said source with each said fluid pressure cylinders for moving said piston by fluid pressure to disengage the piston stem from said registering apertures, and adjustable means on said cylinder for locking the piston against movement by said fluid pressure.



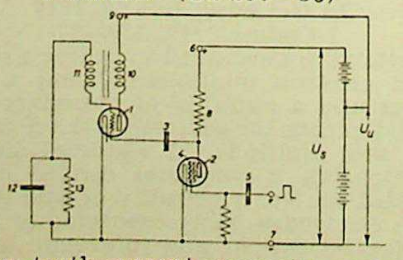
4. Means for suspending a fighting tank from a moving airplane and for discharging the tank from the plane whilst the latter is in flight comprising pairs of brackets depending from said airplane and spaced longitudinally of the body of said plane a distance sufficient to permit insertion of a portion of the fighting tank between the pairs of brackets, registering apertures in said brackets and inserted tank portion, fluid pressure cylinders within the tank having one end thereof secured to the tank wall at each tank aperture, a piston stem within each cylinder and of a length greater than the length of said cylinder, a piston secured to said piston stem intermediate the ends thereof, a compression spring encircling one end of the piston stem between one side of the piston and the opposite cylinder end wall for normally projecting the opposite end of said piston stem through the adjacent registering tank and bracket apertures, an aperture in the end wall of said cylinder opposite the tank wall, said spring encircled end of the piston stem registering with said latter cylinder aperture, an aperture in said cylinder in front of said piston for admission of fluid pressure to actuate said piston against the pressure exerted thereon by said spring, and detachable means mounted on said cylinder for closing said cylinder end wall aperture to prevent protrusion of said piston stem thereby locking the piston against reciprocal movement within said cylinder.

2,310,888

SYNCHRONIZED SAW-TOOTH CURRENT GENERATOR

Herbert Bähring, Klein-Machnow, and Theodor Mulert, Zehlendorf, Germany; vested in the Alien Property Custodian

Application March 20, 1941, Serial No. 384,337
In Germany March 13, 1940
4 Claims. (Cl. 250—36)



1. A saw-tooth current generator comprising a

generator tube and a synchronizing tube, a source of operating voltage for said generator tube, a condenser, a charging circuit for said condenser including means for applying thereto a higher voltage than said operating voltage, a discharging circuit for said condenser including said synchronizing tube and impedance means for developing a voltage pulse in accordance with the condenser discharge current, means for applying said voltage pulse to the control grid of said generator tube for synchronizing the operation thereof, and means for periodically rendering said synchronizing tube conducting in accordance with synchronizing pulses thereby periodically to discharge said condenser.

2,310,889

VINYL RESIN COMPOSITION AND ARTICLES OF MANUFACTURE COMPRISING SAME

Leonard Becker, Chicago, Ill., assignor to S. Buchsbaum and Company, Chicago, Ill., a corporation of Illinois

No Drawing. Application January 24, 1941, Serial No. 375,770

8 Claims. (Cl. 260—43)

1. A composition particularly adapted for use in the manufacture of raincoats, gloves and the like, said composition comprising a vinyl resin which is a co-polymer of vinyl chloride and vinyl acetate, a thermosetting phenolaldehyde resin, methyl methacrylate resin and a plasticizer, the vinyl resin being present in from 60 to 90% by weight of the total resins, the phenol-aldehyde resin being present in from 1 to 10% of the total resins and the methyl methacrylate resin being present in from 5 to 35% by weight of the total resins.

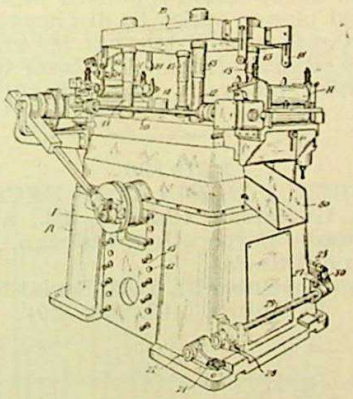
2,310,890

PRESS

Frank A. Brandes, Shaker Heights, Ohio

Application December 16, 1941, Serial No. 423,200

8 Claims. (Cl. 164—23)



1. In a press of the character referred to, the combination of a frame adapted to be supported upon a floor and having an upper surface adapted to support a die or the like, a cross-head located within said frame near its base, said cross-head having ways on its exterior, a crankshaft for reciprocating said cross-head, means for rotatably supporting said crankshaft in said frame below said upper surface of said frame and above said cross-head, means for rotating said crankshaft, means for operatively connecting said cross-head and said crankshaft whereby said cross-head is reciprocated upon rotation of said crankshaft, a plurality of ways on the inside of said frame cooperating with said ways on said cross-head for guiding said cross-head, means for effecting relative adjustment between said ways inwardly and outwardly with respect to the interior of said frame, said ways on said frame being located to the side of said crankshaft and extending above and below the lower edge of the concentric part thereof, a second cross-head located above said upper surface of said frame and adapted to carry a die or the like, means for connecting said cross-heads whereby they move as a unit.

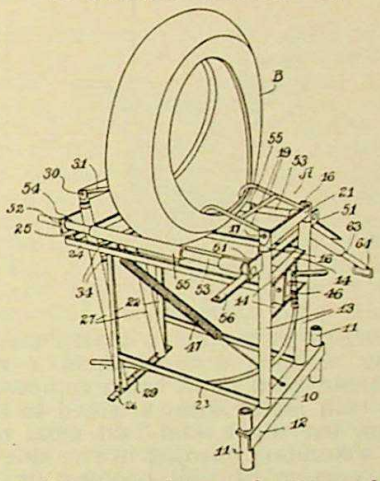
2,310,891

TIRE SPREADER

Charles E. Branick, Fargo, N. Dak.

Application January 17, 1938, Serial No. 185,366

11 Claims. (Cl. 154—9)



1. In a tire spreader, a frame, substantially horizontally extending rods, sleeves thereon longitudinally slidable relative to said rods for slidably supporting a tire casing to slide longitudinally of said rods, a pair of hooks pivoted along fixed axes to one end of said frame engageable with one side of the tire casing, arms pivoted to the other end of said frame, hooks pivoted to said arms engageable with the other side of said tire casing, and means for pivoting said arms for spreading said casing.

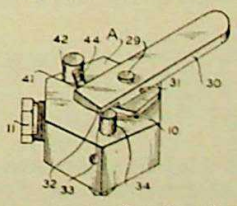
2,310,892

VALVE

Charles E. Branick, Fargo, N. Dak.

Application February 21, 1941, Serial No. 379,934

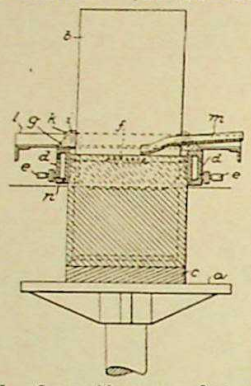
3 Claims. (Cl. 277—42)



1. A three-way control valve including an inlet and an outlet passage, a horizontally extending valve for closing said inlet passage, a sealing gasket for said valve, spring means for normally holding said valve closed, a cam for opening said inlet valve, a stem leading from said cam to the outside of said control valve, a horizontal lever connected to said stem, a gasket around said stem to provide a sealing joint thereabout, spring means for holding said cam against said sealing means about said stem, an exhaust opening, a vertically extending valve for normally closing said exhaust opening, a sealing gasket for said exhaust valve, spring means for holding said ex-

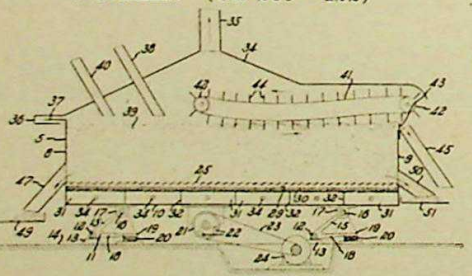
haust valve against said sealing means, and cam means provided on the end of said horizontal lever for causing said exhaust valve to be opened when said first named cam releases said inlet valve to closed position.

2,310,893
METHOD AND DEVICE FOR CASTING PLATED INGOTS
Paul Brenner, Hanover, Germany; vested in the Alien Property Custodian
Application June 4, 1941, Serial No. 396,640
In Germany June 14, 1940
10 Claims. (Cl. 22—58)



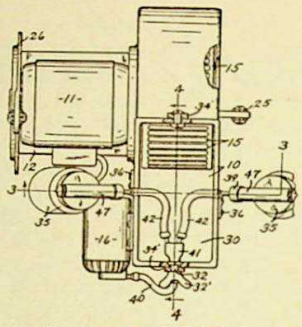
1. A method of casting a plated metal ingot comprising erecting a mold upon a vertically movable table, said mold being composed of at least one thin metal sheet adapted to form the plate upon the ingot, and said mold having a vertically extending opening in one side thereof, closing a portion of said opening by a liquid cooled segment, pouring molten metal in the chamber formed by said wall and segment while lowering said table and solidifying said ingot by a cooling medium applied to said mold and said segment.

2,310,894
DRY FLOTATION, AND MEDIA AND APPARATUS THEREFOR
Jean Albert Brusset, Blairmore, Alberta, Canada
Application January 22, 1941, Serial No. 375,497
9 Claims. (Cl. 209—422)



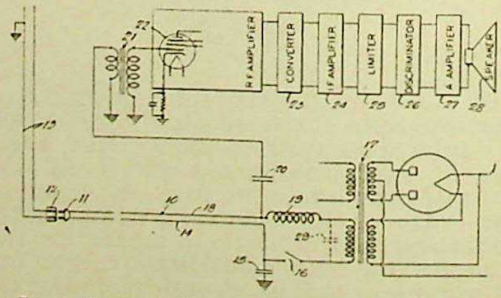
1. In the sink-and-float process of separating a dry mixture of materials of different specific gravities involving the selective flotation of a lighter constituent of such mixture on a dry fluidic medium to which latter is imparted a fluidizing aerating movement and a translating movement, the improvement which consists in forming the medium from a plurality of different ingredients of different specific gravities, each of said ingredients being so subdivided as to be equivalent to each of the other ingredients of the medium in terminal velocity whereby homogeneity of the composite medium is assured, and so adjusting the proportions of said ingredients with respect to each other and to the mixture to be separated as to provide a composite medium having a resultant specific gravity intermediate the specific gravities of the lighter and heavier constituents of the mixture to be separated and closely approaching that of the lighter constituent, whereby the composite medium is fluidizable with a minimum of aeration.

2,310,895
APPARATUS FOR DISTRIBUTING INSECTICIDES AND GERMICIDES
Henry W. Brown, Syracuse, N. Y., assignor to The Brown Corp., Syracuse, N. Y., a corporation of New York
Application March 9, 1940, Serial No. 323,188
2 Claims. (Cl. 261—116)



1. An insecticide or germicide spray apparatus adapted to diffuse a spray liquid in the form of a fog, comprising a blower having a casing and an elongated discharge outlet and adapted to move a relatively large volume of air, air dividing and distributing means pivotally mounted on said casing adjacent said blower outlet and comprising two curved vanes joined together back to back along one edge and curving outwardly away from each other towards their free ends, the joined edge of said vanes being arranged longitudinally and centrally of said blower outlet, whereby two carrier air currents are produced flowing substantially oppositely to one another, two atomizers for spray liquid mounted adjacent each side of said blower outlet to discharge atomized spray into each of said two carrier air currents, and means separate from said blower for producing air under relatively high pressure for said atomizers.

2,310,896
FREQUENCY MODULATON RECEIVER
Gilbert E. Gustafson, Chicago, Ill., assignor to Zenith Radio Corporation, Chicago, Ill., a corporation of Illinois
Application November 27, 1941, Serial No. 420,726
19 Claims. (Cl. 250—20)



1. In a frequency modulation receiver for reception of ultra high frequency signals and having amplifying and frequency demodulating means, in combination, a pair of conductors adapted to be connected to power lines, a self-resonant coil and a power supply transformer primary effectively connected across said con-

ductors for series flow of current at said ultra high frequency through said coil from one conductor to the other, means for effectually grounding one of said conductors, and means for supplying ultra high frequency, frequency modulated signal from said coil to said amplifying and frequency demodulating means.

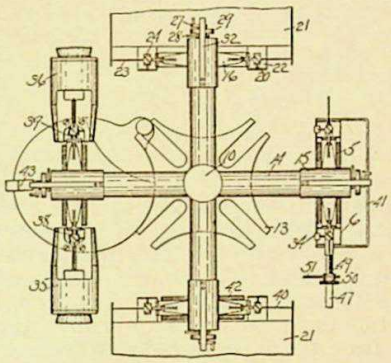
2,310,897

PROCESS FOR BRUSH MAKING

James Byron Jones, West Hartford, and Alfred L. Le Febvre, Hartford, Conn., assignor to The Fuller Brush Company, Hartford, Conn., a corporation of Connecticut

Application April 29, 1939, Serial No. 270,946

13 Claims. (Cl. 300—21)



1. The process for the arrangement of fibrous material that consists in slicing a layer from one side of a collected mass of material, subjecting the layer to a fluid pressure on one side thereof to preserve its form, and then moving said layer while subjected to said pressure to a location for subsequent operations.

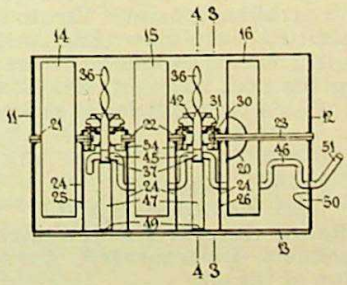
2,310,898

GAME

Frank R. Labin and Stephen Szulist, Buffalo, N. Y.; said Szulist assignor to said Labin

Application February 17, 1941, Serial No. 379,152

19 Claims. (Cl. 273—143)



1. A game comprising a casing, a plurality of independently rotatable dials carried by said casing, means for individually rotating each of said dials, comprising a shaft non-rotatably fixed in the dial, a drive pinion fixed on said shaft, a drive gear for cooperation with said pinion, means for causing said pinion to be rotated by said drive gear upon rotation thereof in one direction, operating means for rotating said drive gear, said operating means serving to move said drive gear out of meshing relation with said pinion when said drive gear stops its actuating rotation, and a stop yoke engageable with each of said pinions for arresting the rotation of said dials.

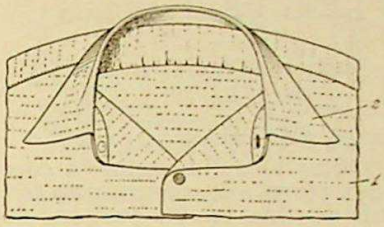
2,310,899

COMBINATION SPORT AND DRESS SHIRT

Jules C. Leeds, Deal, N. J., assignor to The Manhattan Shirt Company, New York, N. Y., a corporation of New York

Application April 24, 1941, Serial No. 390,023

3 Claims. (Cl. 2—116)



1. A shirt for use as a dress shirt or a sport shirt, said shirt having an attached collar comprising outer and inner facings and an interlining having substantially the same configuration and cut to provide end tabs at the front of the collar, a fold-forming guide positioned in the lower central portion of the collar intermediate one of the facing layers and the interlining and in spaced relation to said end tabs, said guide at the longitudinal center of the collar being greater in width than the width of said end tabs and adapted, when the collar is worn as a dress collar, to cooperate with said spaced end tabs to establish an upright neckband portion around the entire collar and an overlying folded portion whose width at the rear of the collar is determined by said guide, the length of said guide being such that its ends terminate at points spaced sufficiently from said end tabs to enable the front portions of the facings, when the collar is worn as a sport collar with the tabs in spaced relation, to be spread readily outwardly into a relatively flat condition.

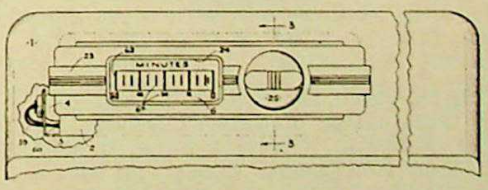
2,310,900

INDICATOR FOR COOKING STOVES

Charles M. Mayer, Mansfield, Ohio, assignor to The Tappen Stove Company, Mansfield, Ohio, a corporation of Ohio

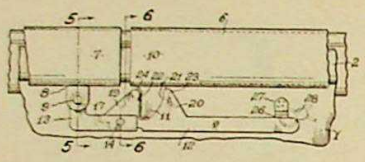
Application June 5, 1941, Serial No. 396,748

5 Claims. (Cl. 161—15)



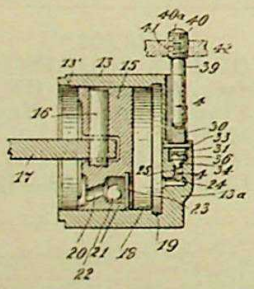
1. A time indicator comprising a timing mechanism, a visible indicator driven from said timing mechanism, illuminating means for said indicator energized by the setting of said timing mechanism and de-energized when said indicator has moved a predetermined distance determined by the setting of said timing mechanism, said timing mechanism including a power shaft, a slotted rack having a contiguous opaque portion driven from said power shaft and movable in a straight line and connected with said visible indicator, a dial positioned adjacent the said visible indicator and calibrated in units of time and having an elongated slot therein disposed over said visible indicator, and a translucent shield disposed between said illuminating means and said rack and cooperating therewith to indicate in contrasting colors the unexpired time for any given setting of the indicator.

2,310,901
CLOSING RING
Arthur H. Van Horn, Rocky River, Ohio, assignor to Cornell Securities Corporation, Cleveland, Ohio, a corporation of Delaware
Application January 15, 1941, Serial No. 374,544
3 Claims. (Cl. 220—61)



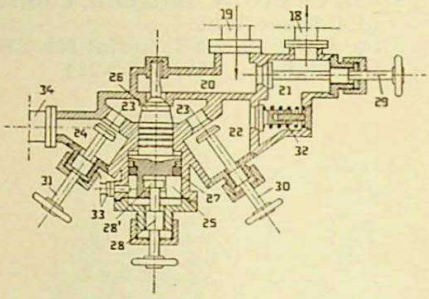
1. A clamping ring for sealing a cover on the open end of a receptacle comprising a transversely split channeled ring having portions engageable with the cover and with the receptacle to press the same together when the ring is contracted, members depending from the ring near its respective ends, and means for contracting and expanding the ring, said means including a lever pivotally connected with one of said ring carried members, a handle pivoted to said lever, a stop on said lever engageable with a portion of the handle for movement with the lever in one direction but movable independently of the lever in an opposite direction, and a pair of longitudinally spaced abutments carried by the lever handle to engageably receive therebetween the said other ring carried member whereby upon movement of the lever handle in one direction the ring is contracted.

2,310,902
CHECK VALVE FOR DOOR CLOSERS
John F. Voelkel, Brooklyn, N. Y., assignor, by mesne assignments, to Marie Anna Bommer Frohlich
Application May 13, 1940, Serial No. 334,779
1 Claim. (Cl. 251—127)



A check valve for use in a door closer and check, comprising a valve chamber having a conical valve seat, a valve member in said chamber having a concaved upper end and a lower end conically shaped and adapted to cooperate with said conical valve seat, said valve chamber above said seat being diametrically larger than said valve member to permit relative movement of the latter transversely in said valve chamber, whereby said valve member accommodates itself to said valve seat, said valve member having a transverse opening, a transverse rod of a diameter less than the diameter of said opening secured at its opposite ends to the wall of said valve chamber and spaced from the walls of said opening, said transverse rod and opening forming a loose connection permitting said valve member to flow transversely and longitudinally freely in said chamber between the limits of said loose connection, and adjusting means movable towards and away from said valve member and cooperating with said valve member for adjusting the extent of longitudinal movement of the latter away from said valve seat within the limits of said loose connection, and having a convex portion cooperating with the concave portion of the valve member.

2,310,903
APPARATUS FOR EFFECTING SMOKELESS COMBUSTION
Stefan Wikarski, Warsaw, Poland; vested in the Alien Property Custodian
Application July 8, 1939, Serial No. 283,510
In Poland April 1, 1939
4 Claims. (Cl. 110—61)

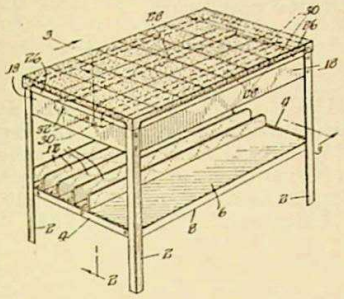


1. In apparatus for smokeless fuel combustion in locomotive furnaces and the like wherein are provided, a steam chest, a steam operated boiler blower and steam operated preheated air blowers; a steam control device which includes a casing having a primary chamber having an entrance for steam under pressure, a central chamber, a port between said primary chamber and said central chamber, an automatic valve controlling said port, a chamber having an inlet adapted for connection with the steam chest of the locomotive and into which chamber said automatic valve extends for seating operation under steam chest pressure, said casing having two additional chambers each having a port communicating with said central chamber, a manually operable valve for each of said last named ports, one of said additional chambers having an inlet adapted for connection with the boiler blower, said casing having a sixth chamber provided with a port for connection to the preheated air blowers and having a port for communication with said primary chamber and a port for communication with the second of said two additional chambers, a manually operable valve controlling passage through the port between said sixth chamber and said primary chamber, and a spring closed valve in said sixth chamber for the port between that chamber and the second of said two additional chambers.

2,310,904
GAS WELDING TABLE
James E. Bales, Aurora, Ill., assignor to Lyon Metal Products, Incorporated, Aurora, Ill., a corporation of Illinois
Application October 25, 1941, Serial No. 416,484
4 Claims. (Cl. 311—105)

1. A gas welding table comprising four corner legs, each having flanges 90 degrees apart and lying in a common plane with the flange of another leg, four sheet metal panel strips disposed vertically and having their outer ends connected to flanges of the leg at the inside walls of said leg, said panel strips providing outwardly extending horizontal flanges and an upwardly extending detaining flange, a rigidifying and supporting member comprising angle iron strips angularly disposed and interconnected to form a substantially hollow rectangular figure providing spaced horizontal flanged walls lying

in a common plane with and spaced from the horizontal walls of said panel members, the com-



mon plane of said horizontal flanges lying substantially below the tops of said upwardly extending detaining flanges.

2,310,905

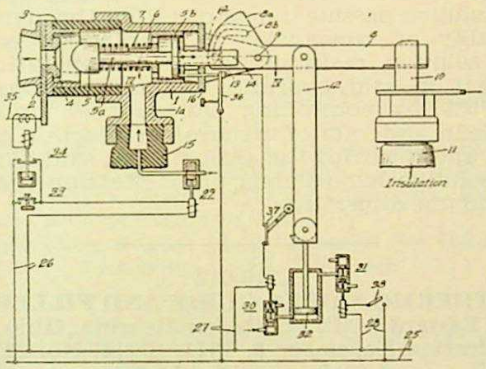
ELECTRICAL SWITCHING APPARATUS

Alfred R. Blandford, Stafford, England, assignor to The English Electric Company Limited, London, England, a British company

Application June 2, 1939, Serial No. 277,005

In Great Britain June 3, 1938

19 Claims. (Cl. 200—148)



1. In combination, a circuit breaker having relatively movable contacts, means biasing said contacts closed to close said breaker, means operable to open said contacts, a disconnecting switch electrically connected in series with said circuit breaker, operating means for opening and closing said switch, means for causing said switch operating means to open said switch immediately after each opening operation of said circuit breaker, and means interconnecting said circuit breaker and switch for preventing closing of said circuit breaker until said switch is moved toward closed position and for causing closing of said circuit breaker during the closing movement of said switch.

2,310,906

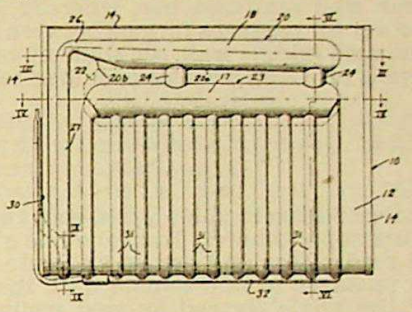
EVAPORATOR

Bernard C. Johnson, Libertyville, Ill., assignor to Houdaille-Hershey Corporation, Detroit, Mich., a corporation of Michigan

Application June 19, 1939, Serial No. 279,878

16 Claims. (Cl. 62—126)

1. An open ended sheet metal evaporator unit comprising secured-together contiguous metal sheets defining the side walls and bottom of a sharp freezing chamber, at least one of said sheets being embossed to define a header chamber in each side wall, and at least one of said sheets being embossed to define a spent refrigerant outlet passageway along the side walls and bottom of



the unit connecting the tops of the header chambers.

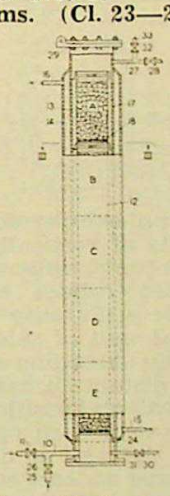
2,310,907

CATALYTIC CONVERSION APPARATUS

Frank M. McMillan, Berkeley, Calif., assignor to Shell Development Company, San Francisco, Calif., a corporation of Delaware

Original application January 27, 1941, Serial No. 376,194. Divided and this application October 6, 1941, Serial No. 413,785

3 Claims. (Cl. 23—288)



1. A converter for effecting catalytic conversions of fluid reactants which comprises an elongated reaction chamber, means for maintaining a temperature controlling medium in direct contact with the external walls of said reaction chamber, a plurality of catalyst containers having open tops and perforated bottoms removably positioned one above the other within said reaction chamber, said containers being provided with co-operating members forming substantially vapor-tight connections between adjoining containers, the sides of said containers being in contact substantially throughout their entire length with the wall of said reaction chamber, fluid inlet at one end of said reaction chamber, and fluid outlet at the other end of said reaction chamber.

2,310,908

REED HOLDER

Walter Neuerburg, Cologne-Marienburg, Germany; vested in the Alien Property Custodian

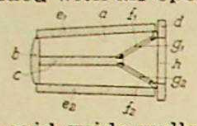
Application October 13, 1941, Serial No. 414,743

In Germany June 15, 1940

2 Claims. (Cl. 84—376)

1. A reed holder provided with two rows of air passages and intended for use in accordions and similar musical instruments fitted with a register slide for the air openings leading to the air passages, comprising a rear wall, a middle wall, a

bar, said middle wall extending between said rear wall and said bar, reed plates extending between said rear wall and said bar, whereby said reed plates cover air passages formed between said rear wall and said middle wall, air shut-off valves and guide walls provided with air openings, said valves



being carried by said guide walls, said guide walls extending approximately from the line of contact of said reed plates and bar at an acute angle to the air passages to said middle wall, the vertical line of the angle formed by said inclined walls extending approximately on the level with said middle wall and being flush therewith.

2,310,909

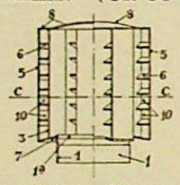
ASPIRATOR DEVICE FOR SMOKE AND AIRING CONDUITS

Louis Petrovitch, Paris, France; vested in the Alien Property Custodian

Application February 26, 1940, Serial No. 320,976

In Luxemburg February 27, 1939

4 Claims. (Cl. 98—66)



1. An aspirator of the character described comprising a plurality of vertically extending plates mounted to form the peripheral wall of an outlet chamber, adjacent plates being peripherally spaced to provide a plurality of outlet openings in the peripheral wall of said chamber, a plurality of vertically extending screens of a width greater than the distance between adjacent plates of the chamber wall and positioned on the outside of said wall one over each opening and spaced outwardly from the wall at distance to provide openings of an area at least equal to the area of the openings covered by the screen, and a plurality of vertically spaced horizontally extending deviating baffles positioned in the openings between the screen and the wall of the chamber.

2,310,910

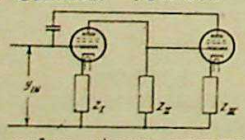
BAND-PASS AMPLIFIER CIRCUITS

Noël Meyer Rust, Chelmsford, Joseph Douglas Brailsford, London, and Ernest Frederick Goodenough, Springfield, Chelmsford, England, assignors to Radio Corporation of America, a corporation of Delaware

Application April 30, 1941, Serial No. 391,204

In Great Britain October 19, 1939

7 Claims. (Cl. 250—36)



1. A multi-valve stage comprising a pair of valves, an inter-valve coupling impedance therebetween, and an impedance in the common part of the output and input circuits of each valve for producing negative feed-back from the output to the input of each valve, the value of each cathode impedance being such that the product of the impedance and the mutual conductance of the valve with which it is associated is considerably greater than unity, the arrangement being such as to produce a negative admittance effect at the input of the stage which is independent of valve constants.

2,310,911

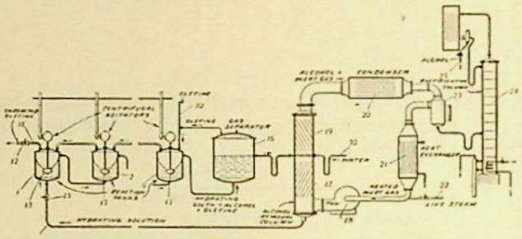
HYDRATION OF OLEFINS

Henri Martin Guinot, Niort, Deux-Sevres, France; vested in the Alien Property Custodian

Application November 15, 1938, Serial No. 240,593

In France November 17, 1937

6 Claims. (Cl. 260—641)



1. A continuous process of hydrating olefins directly into alcohols comprising essentially effecting a plurality of successive fine dispersions of the gaseous olefin in an acid hydrating solution, the concentration of which is below that giving rise to secondary reaction, said successive fine dispersions taking place in a plurality of successive interconnected receptacles, said hydrating solution passing in one direction through said plurality of receptacles in counter-current to said solution, maintaining the concentration of alcohol in said hydrating solution always below 5% by controlling the rate of addition of olefin and rate of removal of reaction products, and removing the alcohol from said hydrating solution immediately after effecting the last of said fine dispersions.

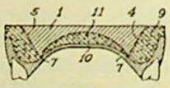
2,310,912

THERMO MODEL GUIDE AND FILLER

Edward I. Mintz, Shaker Heights, Ohio

Application November 5, 1941, Serial No. 417,934

3 Claims. (Cl. 18—5.7)



1. The combination with a dental model, of a rigid member fully inserted in the model material while the latter is in a plastic state to produce a permanent seat or impression thereof, said insert comprising a body having a concave palate section and having converging side walls substantially enclosing the palate section and adapted to form a relieved channel in the model around said palate section to facilitate the removal of the subsequently hardened model material.

2,310,913

VALVE MECHANISM

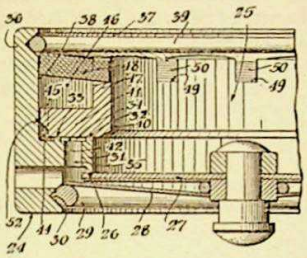
Warner T. Tabb, Brooklyn, N. Y., assignor, by mesne assignments, to Reconstruction Finance Corporation, New York, N. Y., a corporation of the United States

Application August 5, 1941, Serial No. 405,485

10 Claims. (Cl. 277—61)

9. Valve mechanism comprising, in combination, a frame having opposed sides and a fluid passage of appreciable dimension extending between the opposed sides, a valve seat on one side of said frame circumambient of the fluid passage, a valve plate structure biased to said seat by

spring structure held on said frame to control flow of fluid through the fluid passage by permitting flow in only one direction, a valve seat structure on the opposite side of said frame circumambient of the fluid passage, said frame having a second fluid passage open to the first mentioned side thereof to permit flow in the opposite direction past said first mentioned valve seat, a second valve plate structure circumambient of the first mentioned fluid passage with substan-



tially all portions thereof extending laterally outwardly of the fluid passage thereby avoiding material interference with flow of fluid through the first mentioned fluid passage, and other spring structure entirely separate from the first mentioned spring structure also held on said frame biasing said second mentioned valve plate structure to the second mentioned valve seat structure with a predetermined pressure to close the second fluid passage against flow in the first mentioned direction.

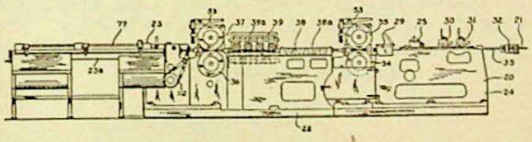
2,310,914

APPARATUS FOR OPERATING ON WIRE STOCK

Frederick W. Gaines, 3rd, Cleveland Heights, and William A. Ehlert, South Euclid, Ohio, assignors to The Ajax Manufacturing Company, Euclid, Ohio, a corporation of Ohio

Application August 25, 1941, Serial No. 408,142

11 Claims. (Cl. 140—140)



1. In apparatus of the character described, a pair of cooperating feed rolls adapted to receive therebetween a strand of wire stock to be fed, a frame member having one of said rolls mounted thereon and having a guideway therein above said one roll, a head carrying said second roll, said head being hinged to said frame member for movement in said guideway, a lever pivoted on said frame at one side of said guideway and engageable with said head, a fulcrum at the other side of said guideway and movably connected with the frame by means including a compression spring, and a second lever pivoted on said fulcrum and having a cam portion held against the first lever by the action of said spring on said fulcrum.

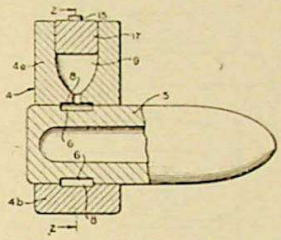
2,310,915

PROJECTILE

Roy T. Hurley, Dobbs Ferry, N. Y., assignor to Bendix Aviation Corporation, South Bend, Ind., a corporation of Delaware

Application April 16, 1938, Serial No. 202,399

5 Claims. (Cl. 102—93)



1. A projectile comprising a body of hard metal and a rotating band formed from an alloy having copper as a principal ingredient thereof, said band being fused directly to said body to form a bond with the metal of said body.

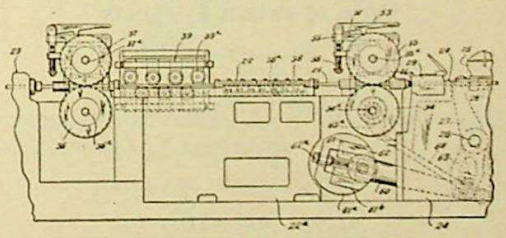
2,310,916

APPARATUS FOR DRAWING AND STRAIGHTENING WIRE STOCK

Frederick W. Gaines, 3rd, Cleveland Heights, and William A. Ehlert, South Euclid, Ohio, assignors to The Ajax Manufacturing Company, Euclid, Ohio, a corporation of Ohio

Original application August 25, 1941, Serial No. 408,142. Divided and this application December 6, 1941, Serial No. 421,930

3 Claims. (Cl. 29—34)

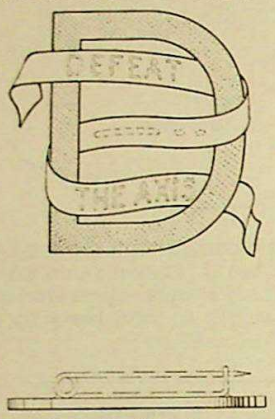


1. In apparatus of the character described, a slide having a wire-drawing die thereon, means for reciprocating said slide for intermittently pushing said die over a strand of wire stock, a pair of cooperating feed rolls adjacent said slide and engageable with the drawn stock, a second pair of feed rolls spaced from the first and also engageable with the drawn stock, straightening means arranged to operate on the stock between said pairs of feed rolls, and means for driving both pairs of feed rolls intermittently and in timed relation to the actuation of said die slide.

DESIGNS

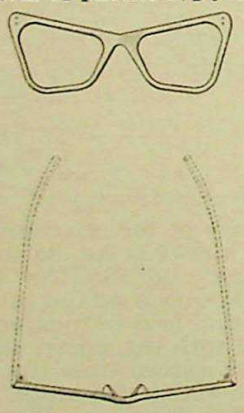
FEBRUARY 9, 1943

134,975
DESIGN FOR A PIN OR SIMILAR ARTICLE
Sam Favari, Weirton, W. Va.
Application April 24, 1942, Serial No. 106,685
Term of patent 3½ years



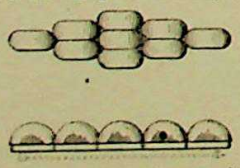
The ornamental design for a pin or similar article, as shown.

134,976
DESIGN FOR A SPECTACLE FRAME OR SIMILAR ARTICLE
Isidor Fishberger, New York, N. Y., assignor of one-half to Emanuel Pappert, Flushing, N. Y.
Application May 20, 1942, Serial No. 106,958
Term of patent 3½ years



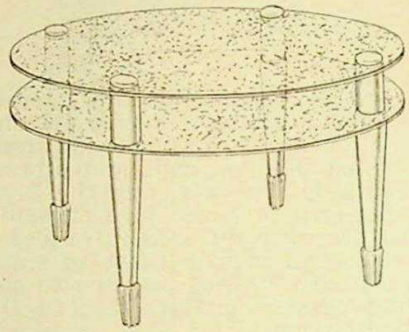
The ornamental design for a spectacle frame or similar article, as shown and described.

134,977
DESIGN FOR A JEWELRY PIN
Maximilian C. Meyer, Brooklyn, N. Y.
Application June 5, 1942, Serial No. 107,126
Term of patent 7 years



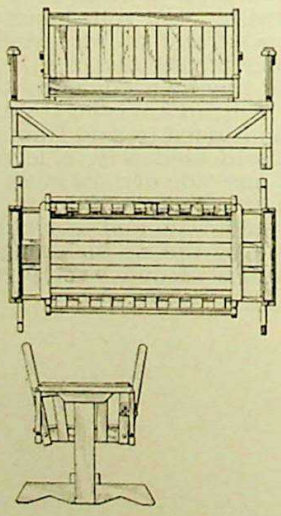
The ornamental design for a jewelry pin, substantially as shown and described.

134,978
DESIGN FOR A TABLE
Chauncey E. Waltman, Chicago, Ill., assignor to Sandel Manufacturing Co., Chicago, Ill., a corporation of Illinois
Application September 26, 1942, Serial No. 108,342
Term of patent 7 years



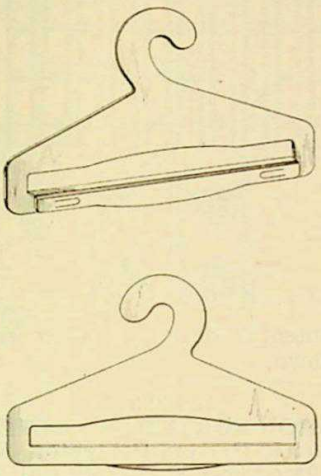
The ornamental design for a table, substantially as shown.

134,979
DESIGN FOR A COMBINED GLIDER AND CRADLE
Ernest W. Worley, Kansas City, Kans., assignor to Consolidated Razor Blade Co., Inc., Jersey City, N. J., a corporation of New Jersey
Application June 24, 1942, Serial No. 107,333
Term of patent 7 years



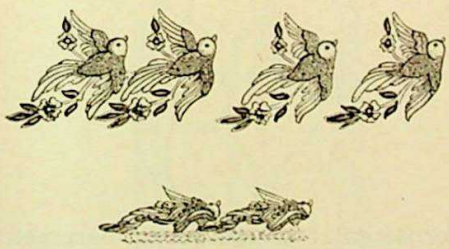
The ornamental design for a combined glider and cradle, as shown.

134,980
DESIGN FOR A GARMENT HANGER
Thomas Whelan Benner, Miami, Fla., assignor to Benner Box & Printing Company, Miami, Fla., a corporation of Florida
Application June 2, 1942, Serial No. 107,080
Term of patent 14 years



The ornamental design for a garment hanger, substantially as shown.

134,981
DESIGN FOR A SEPARABLE BROOCH
Adolph Katz, Providence, R. I., assignor to Cohn & Rosenberger, Inc., New York, N. Y., a corporation of New York
Application January 15, 1943, Serial No. 109,270
Term of patent 3½ years



The ornamental design for a separable brooch, substantially as shown.

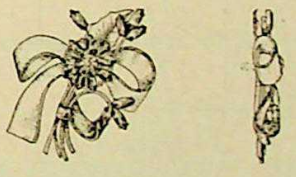
134,982
DESIGN FOR A BROOCH OR SIMILAR ARTICLE
Adolph Katz, Providence, R. I., assignor to Cohn & Rosenberger, Inc., New York, N. Y., a corporation of New York
Application January 15, 1943, Serial No. 109,271
Term of patent 3½ years

The ornamental design for a brooch or similar article, substantially as shown.

134,983
DESIGN FOR A BROOCH OR SIMILAR ARTICLE
Adolph Katz, Providence, R. I., assignor to Cohn & Rosenberger, Inc., New York, N. Y., a corporation of New York
Application January 15, 1943, Serial No. 109,272
Term of patent 3½ years

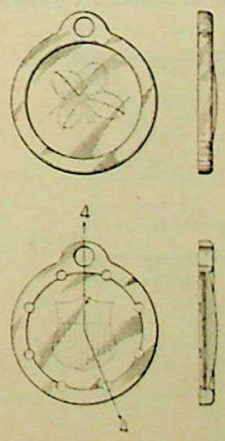
The ornamental design for a brooch or similar article, substantially as shown.

134,984
DESIGN FOR A BROOCH OR SIMILAR ARTICLE
Adolph Katz, Providence, R. I., assignor to Cohn & Rosenberger, Inc., New York, N. Y., a corporation of New York
Application January 15, 1943, Serial No. 109,273
Term of patent 3½ years



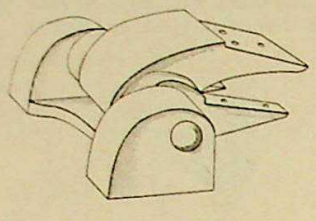
The ornamental design for a brooch or similar article, substantially as shown.

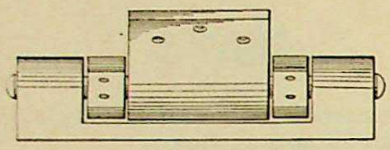
134,985
DESIGN FOR A MEDALLION
Edward K. Madan, Maplewood, N. J.
Application December 9, 1942, Serial No. 108,989
Term of patent 7 years



The ornamental design for a medallion, as shown.

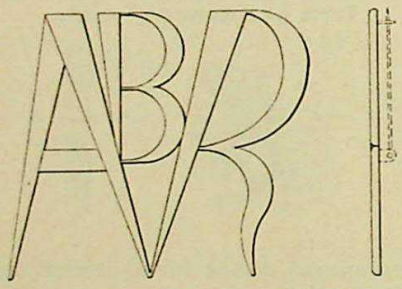
134,986
DESIGN FOR A TOILET SEAT HINGE
William D. Schultz, Dolgeville, N. Y., assignor to Julius Breckwoldt & Son, Inc., Dolgeville, N. Y.
Application September 7, 1942, Serial No. 108,147
Term of patent 3½ years





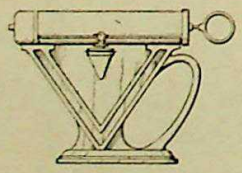
The ornamental design for a toilet seat hinge, as shown.

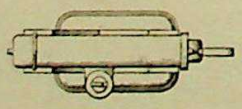
134,987
DESIGN FOR A BADGE OR SIMILAR ARTICLE
Rudolph Zlatohlavek, Manitowoc, Wis.
Application January 9, 1942, Serial No. 105,092
Term of patent 3½ years



The ornamental design for a badge or similar article, as shown.

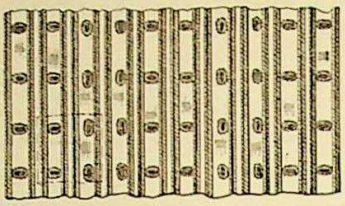
134,988
DESIGN FOR AN ATOMIZER
Harry Elbert Bartram, Sumner, Ill.
Application November 17, 1942, Serial No. 108,798
Term of patent 7 years

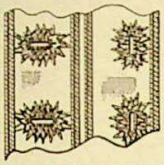




The ornamental design for an atomizer, as shown.

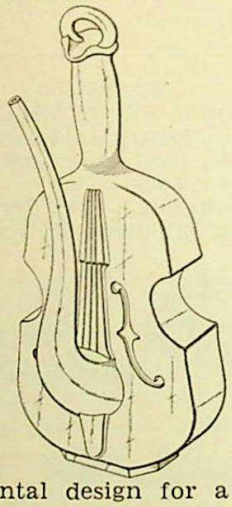
134,989
DESIGN FOR AN EMBROIDERED FABRIC
Joseph Bernstein, New York, N. Y.
Application December 18, 1942, Serial No. 109,060
Term of patent 3½ years





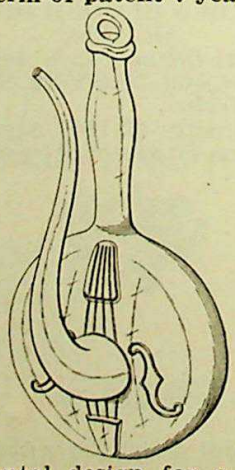
The ornamental design for an embroidered fabric, as shown.

134,990
DESIGN FOR A BAROMETER
Samuel L. Gerson, Bridgeton, N. J.
Application December 8, 1942, Serial No. 108,979
Term of patent 7 years



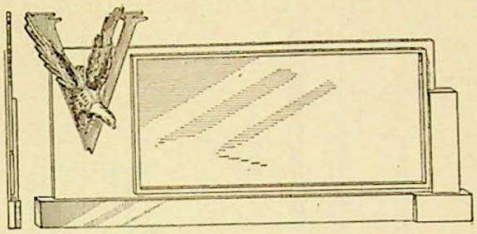
The ornamental design for a barometer, as shown.

134,991
DESIGN FOR A BAROMETER
Samuel L. Gerson, Bridgeton, N. J.
Application December 8, 1942, Serial No. 108,980
Term of patent 7 years



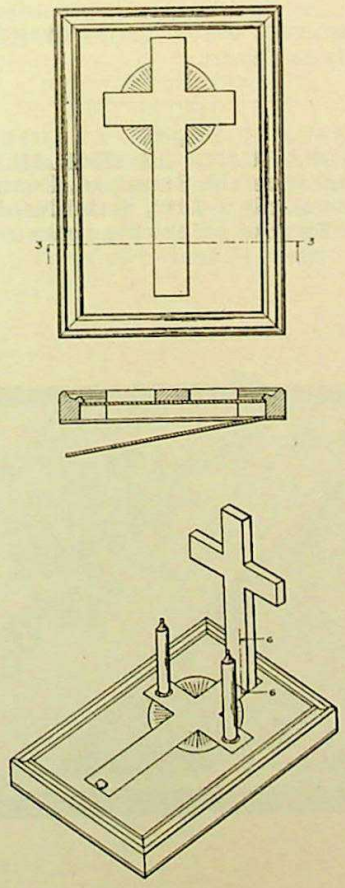
The ornamental design for a barometer, as shown.

134,992
DESIGN FOR A BILLBOARD
Marvin G. Peters, Pittsburgh, Pa., assignor to Pittsburgh Outdoor Advertising Company, a corporation of Pennsylvania
Application December 5, 1942, Serial No. 108,950
Term of patent 7 years



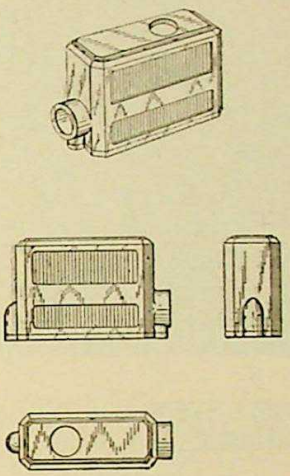
The ornamental design for a billboard, as shown.

134,993
DESIGN FOR A CROSS SUPPORT AND DISPLAY UNIT
Raymond F. Brennan, Attleboro, Mass.
Application November 25, 1942, Serial No. 108,874
Term of patent 7 years



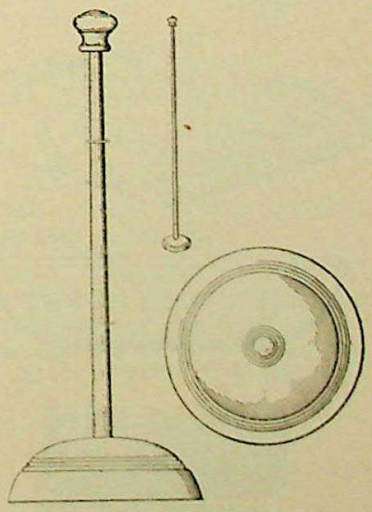
The ornamental design for a cross support and display unit, substantially as shown.

134,994
DESIGN FOR AN ELECTRIC SWITCH HOUSING
Norman C. Fetter, Freeport, Ill., assignor to Micro Switch Corporation, Freeport, Ill., a corporation of Illinois
Application December 18, 1942, Serial No. 109,062
Term of patent 14 years



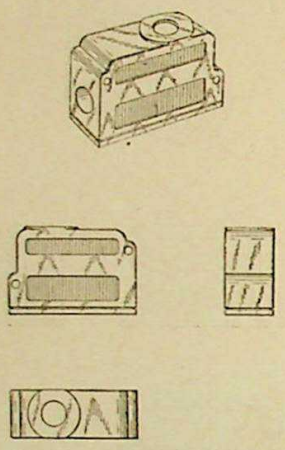
The ornamental design for an electric-switch housing, as shown.

134,995
DESIGN FOR A FLAG STAND
Charles A. Gearing, Bellwood, Ill.
Application November 9, 1942, Serial No. 108,727
Term of patent 14 years



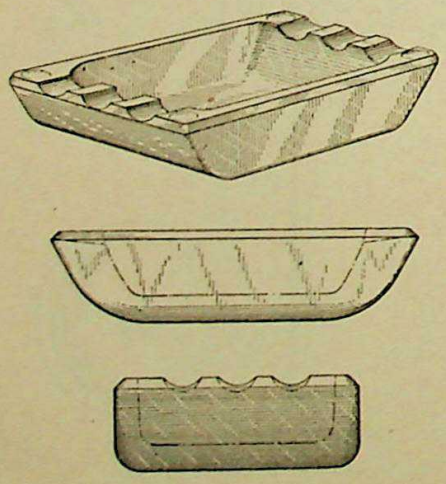
The ornamental design for a flag stand, as shown.

134,996
DESIGN FOR AN ELECTRIC SWITCH HOUSING
Oscar H. Kaminky, Freeport, Ill., assignor to Micro Switch Corporation, Freeport, Ill., a corporation of Illinois
Application December 18, 1942, Serial No. 109,061
Term of patent 14 years



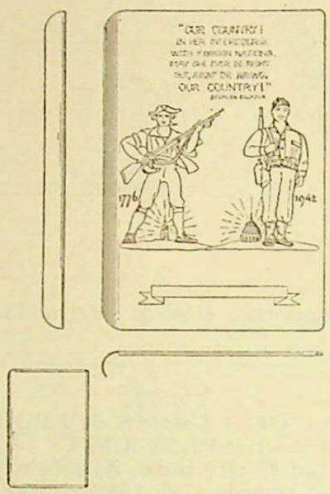
The ornamental design for an electric-switch housing, as shown.

134,997
DESIGN FOR AN ASH TRAY
Carl T. Sloan, Jeannette, Pa., assignor to The Jeannette Glass Company, Jeannette, Pa., a corporation of Pennsylvania
Application January 1, 1943, Serial No. 109,185
Term of patent 14 years



The ornamental design for an ash tray, substantially as shown.

134,998
DESIGN FOR A COVER FOR BIBLES
Jack Galter, Chicago, Ill.
Application November 16, 1942, Serial No. 108,795
Term of patent 3½ years

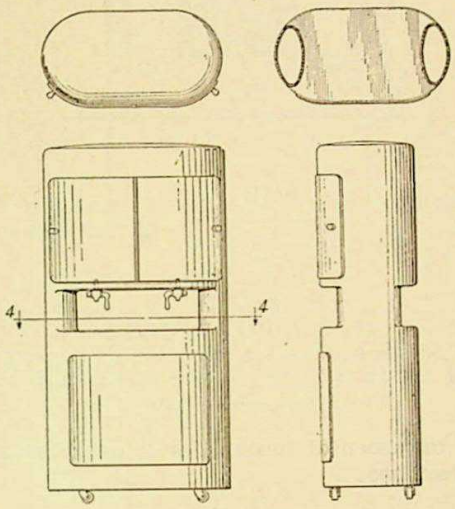


The ornamental design for a cover for Bibles, substantially as shown.

134,999
DESIGN FOR A SCARF OR SIMILAR ARTICLE
Emil Herzfeld, Stamford, Conn.
Application July 9, 1942, Serial No. 107,450
Term of patent 3½ years

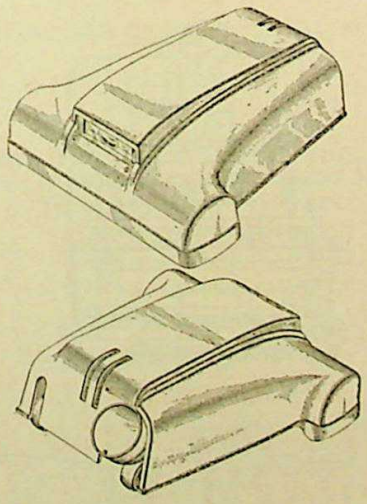
The ornamental design for a scarf or similar article, as shown.

135,000
DESIGN FOR A MILK DISPENSER
Lannie F. Norris, Minneapolis, Minn.
Application June 17, 1942, Serial No. 107,225
Term of patent 7 years



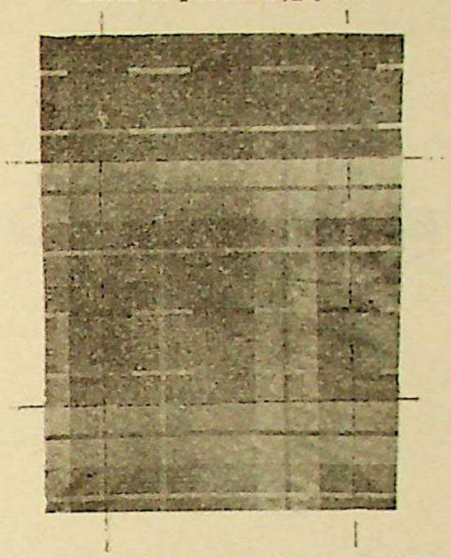
The ornamental design for a milk dispenser, substantially as shown.

135,001
DESIGN FOR A VACUUM CLEANER CASING
Malcolm S. Park, Mount Kisco, N. Y., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a corporation of New Jersey
Application December 8, 1942, Serial No. 108,981
Term of patent 14 years



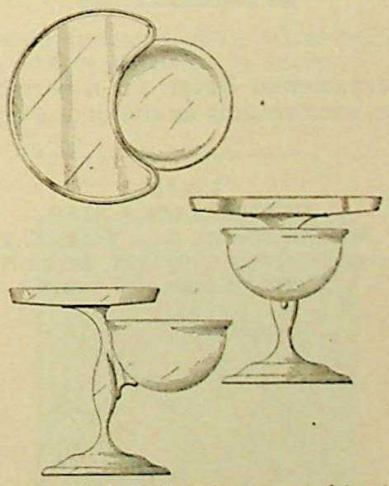
The ornamental design for a vacuum cleaner casing, as shown.

135,002
DESIGN FOR A TEXTILE FABRIC
Edwin Raphaels, New York, N. Y.
Application January 15, 1943, Serial No. 109,274
Term of patent 3½ years



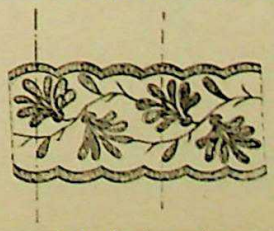
The ornamental design for a textile fabric, substantially as shown and described.

135,003
DESIGN FOR A COMBINATION DESSERT AND CAKE DISH
Ruby Sullivan, Cincinnati, Ohio
Application April 7, 1942, Serial No. 106,487
Term of patent 14 years



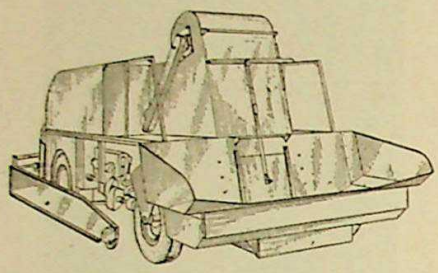
The ornamental design for a combination dessert and cake dish, as shown.

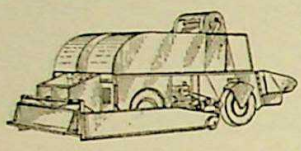
135,004
DESIGN FOR AN EMBROIDERED LACE
Philip Wiener, New York, N. Y.
Application January 13, 1943, Serial No. 109,257
Term of patent 3½ years

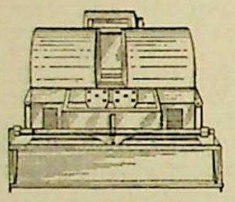


The ornamental design for an embroidered lace, substantially as shown and described.

135,005
DESIGN FOR A PORTABLE PAVING MACHINE
Versal Forrest Baumgardner, Celina, Ohio
Application May 25, 1942, Serial No. 106,995
Term of patent 14 years

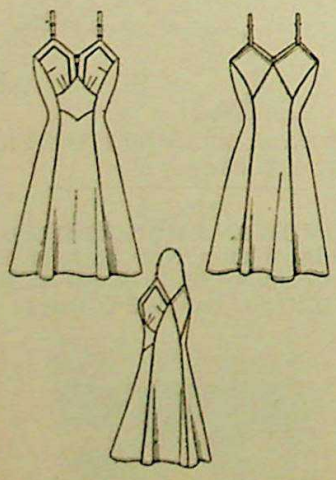






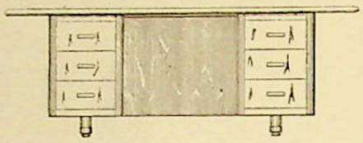
The ornamental design for a portable paving machine, substantially as shown and described.

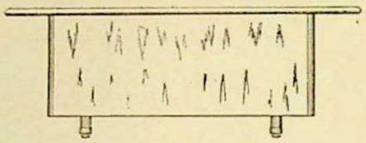
135,006
DESIGN FOR A SLIP
Morton Brown, New York, N. Y.
Application December 16, 1942, Serial No. 109,052
Term of patent 7 years

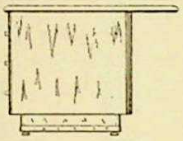


The ornamental design for a slip, substantially as shown and described.

135,007
DESIGN FOR A DESK
Charles I. Center and Wilson E. Tarr, South Bend, Ind.
Application February 12, 1941, Serial No. 98,963
Term of patent 14 years

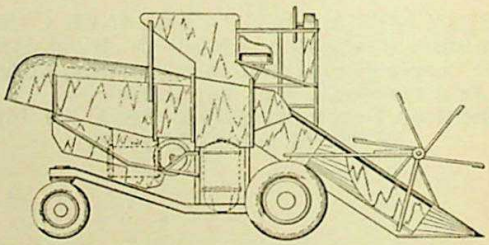


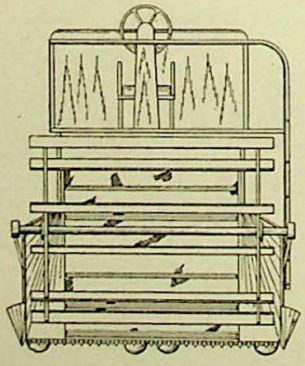


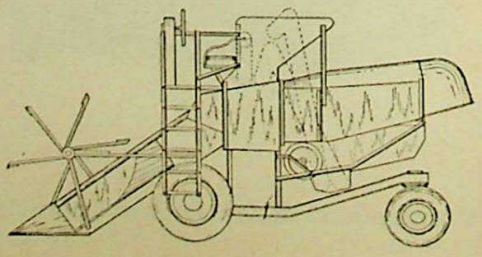


The ornamental design for a desk, as shown and described.

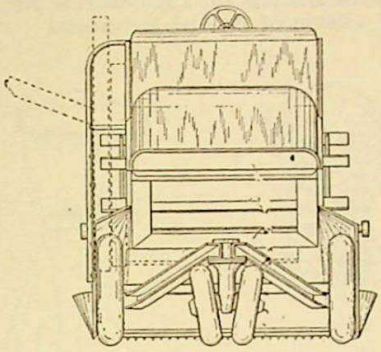
135,008
DESIGN FOR A COMBINE
Charles E. Everett, Racine, Wis., assignor to The Massey-Harris Company, Racine, Wis., a company of Maryland
Application November 3, 1941, Serial No. 104,005
Term of patent 14 years





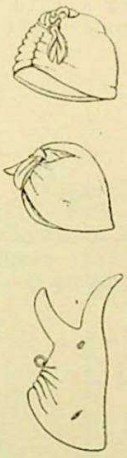


135,008—Continued



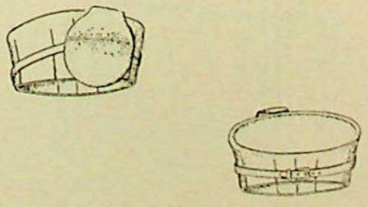
The ornamental design for a combine, as shown and described.

135,009
DESIGN FOR A HAT
Zinaida Harpignies, Kew Gardens, N. Y.
Application November 5, 1942, Serial No. 108,708
Term of patent 3½ years



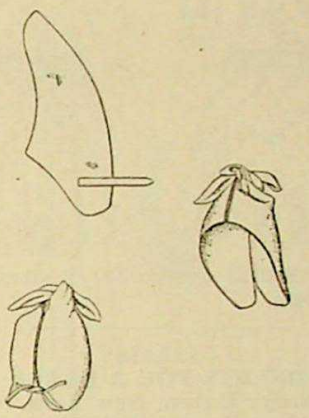
The ornamental design for a hat, as shown.

135,010
DESIGN FOR A HAT
Zinaida Harpignies, Kew Gardens, N. Y.
Application November 21, 1942, Serial No. 108,829
Term of patent 3½ years



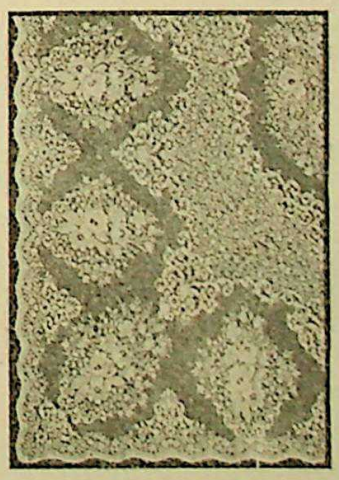
The ornamental design for a hat, as shown.

135,011
DESIGN FOR A HAT
Zinaida Harpignies, Kew Gardens, N. Y.
Application November 21, 1942, Serial No. 108,830
Term of patent 3½ years



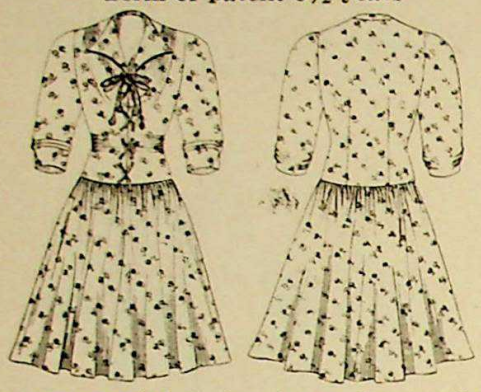
The ornamental design for a hat, as shown.

135,012
DESIGN FOR A LACE TABLECLOTH
Frederick George Hobden, Philadelphia, Pa., assignor to Quaker Lace Company, Philadelphia, Pa.
Application January 14, 1943, Serial No. 109,265
Term of patent 14 years



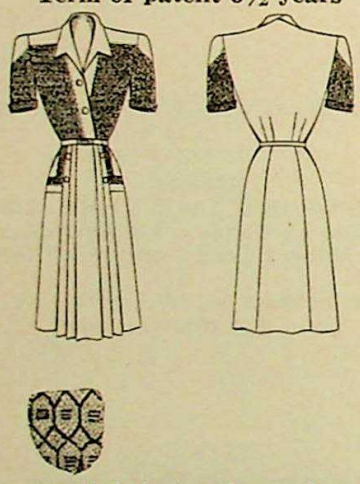
The ornamental design for a lace tablecloth, substantially as shown and described.

135,013
DESIGN FOR A DRESS
Milton Berger, New York, N. Y.
Application January 15, 1943, Serial No. 109,269
Term of patent 3½ years



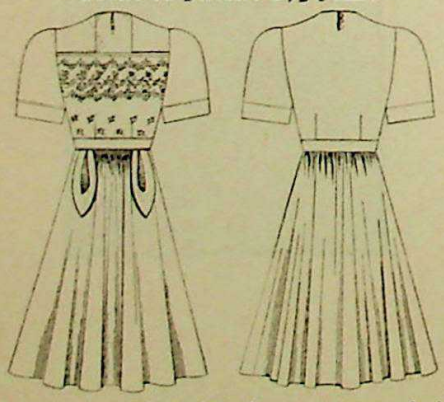
The ornamental design for a dress, substantially as shown.

135,014
DESIGN FOR A DRESS
Alexander Caron, New York, N. Y.
Application January 18, 1943, Serial No. 109,280
Term of patent 3½ years



The ornamental design for a dress, substantially as shown.

135,015
DESIGN FOR A DRESS
Netye D. Carson, New York, N. Y.
Application January 13, 1943, Serial No. 109,249
Term of patent 3½ years

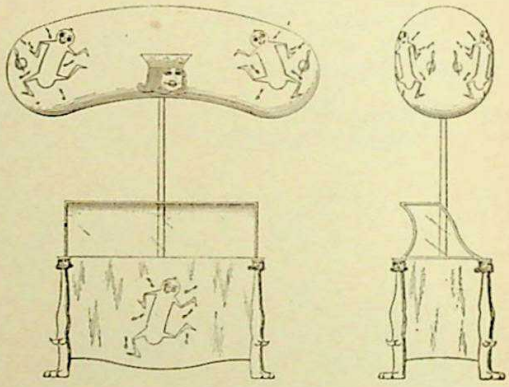


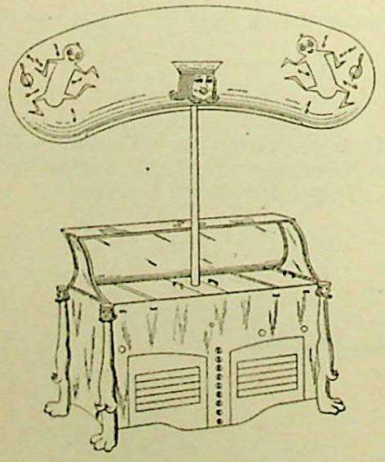
The ornamental design for a dress, substantially as shown.

135,016
DESIGN FOR A DRESS
Netye D. Carson, New York, N. Y.
Application January 13, 1943, Serial No. 109,250
Term of patent 3½ years

The ornamental design for a dress, substantially as shown.

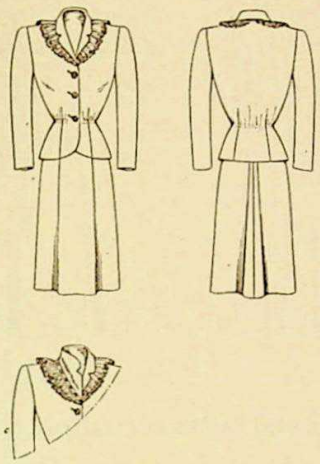
135,017
DESIGN FOR A PURVEYING STAND
Clio Coil, Oklahoma City, Okla.
Application December 3, 1940, Serial No. 97,033
Term of patent 3½ years





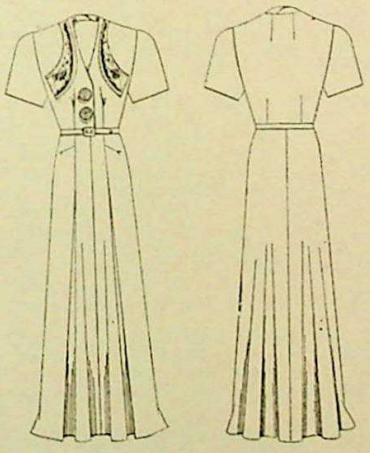
The ornamental design for a purveying stand, as shown and described.

135,018
DESIGN FOR A DRESS
Abe Gershuny, New York, N. Y.
Application January 18, 1943, Serial No. 109,279
Term of patent 3½ years



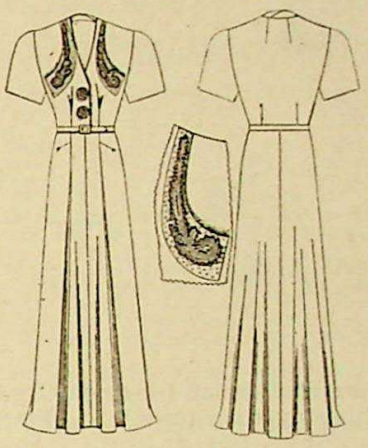
The ornamental design for a dress, substantially as shown.

135,019
DESIGN FOR A DRESS
David E. Gottlieb, New York, N. Y.
Application January 13, 1943, Serial No. 109,252
Term of patent 3½ years



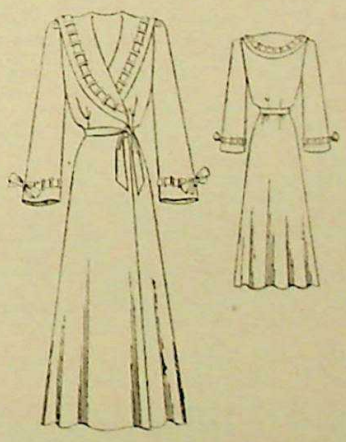
The ornamental design for a dress, substantially as shown.

135,020
DESIGN FOR A DRESS
David E. Gottlieb, New York, N. Y.
Application January 13, 1943, Serial No. 109,253
Term of patent 3½ years



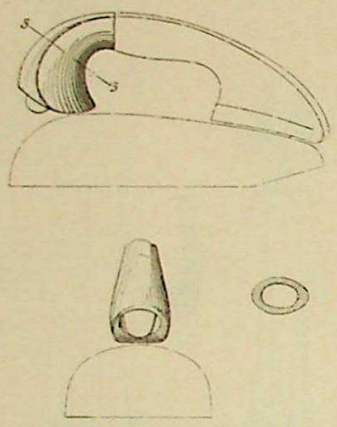
The ornamental design for a dress, substantially as shown and described.

135,021
DESIGN FOR A NEGLIGEE
Violet Giovagnoni, New York, N. Y.
Application November 2, 1942, Serial No. 108,670
Term of patent 3½ years



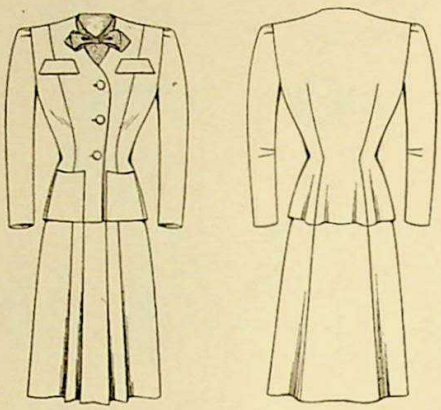
The ornamental design for a negligee, substantially as shown.

135,022
DESIGN FOR A COMBINED FLATIRON AND LAMP HOUSING
Harris D. McKinney, Bucks County, Pa., assignor to Proctor & Schwartz, Inc., Philadelphia, Pa., a corporation of Pennsylvania
Application March 10, 1942, Serial No. 106,142
Term of patent 14 years



The ornamental design for a combined flatiron and lamp housing, substantially as shown and described.

135,023
DESIGN FOR A DRESS
Dorothy Seligman, New York, N. Y.
Application January 18, 1943, Serial No. 109,281
Term of patent 3½ years



The ornamental design for a dress, substantially as shown.

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Ams, Max, Inc., New York, N. Y. Prune juice. Serial No. 457,233; Feb. 9. Class 45.

Ar-Jay Laboratories, Inc., Ontario, Calif. Shampoos, rinses, wave-set preparation, etc. Serial No. 457,597; Feb. 9. Class 6.

Artistoc Limited, Nottinghamshire, England. Socks and stockings. Serial No. 449,247; Feb. 9. Class 39.

Babbitt, B. T., Inc., Albany and New York, N. Y. Dehydrated soup mixtures. Serial No. 457,359; Feb. 9. Class 46.

Bay Shore Canning Company, Alviso, Calif. Canned vegetables and fruits. Serial No. 457,234; Feb. 9. Class 46.

Borg-Warner Corporation, Chicago, Ill. Furnaces. Serial Nos. 445,680–1; Feb. 9. Class 34.

Brundage, J. R., Inc., New York, N. Y. Writing paper and envelopes. Serial No. 455,045; Feb. 9. Class 37.

Bunn, John T., doing business as Crown Packing Company, Los Angeles, Calif. Fresh vegetables. Serial No. 456,710; Feb. 9. Class 46.

Burndy Engineering Company, Inc., New York, N. Y. Electrical connectors. Serial No. 457,197; Feb. 9. Class 21.

Burnett's Incorporated, Newark, N. J. Tonic food in biscuit form for birds. Serial No. 449,891; Feb. 9. Class 46.

Butler Paper Corporation, Chicago, Ill. Wrapping paper, manila paper, envelopes, etc. Serial No. 454,822; Feb. 9. Class 37.

C Y C Products Co. (See Warfield, Rose.)

California Fruit Processors, Inc., San Francisco, Calif. Canned citrus fruit juices. Serial No. 457,540; Feb. 9. Class 46.

Chicago Flexible Shaft Company, Chicago, Ill. Animal shearing machines, etc.; clippers for human hair, etc.; double end grinders, etc.; belt driven gears; positive drive gears for shearing machines, etc. Serial No. 456,584; Feb. 9. Class 23.

Chicago Flexible Shaft Company, Chicago, Ill. Lawn sprinklers, hose nozzles, hose couplings, etc. Serial No. 456,586; Feb. 9. Class 13.

Chicago Tribune-New York News Snydicate, Inc., New York, N. Y. Series of cartoons. Serial No. 457,167; Feb. 9. Class 38.

Collegiate Manufacturing Company, Inc., New York, N. Y. Pajamas, nightgowns, slips, etc. Serial No. 443,653; Feb. 9. Class 39.

Connell, Robert, and S. I. Wilson, Portland, Oreg. Waterproofing composition for mixing with cement. Serial No. 456,972; Feb. 9. Class 12.

Contact Lens Service. (See Salvatori, Gertrud.)

Corning Glass Works, Corning, N. Y. Rotating seal rings for centrifugal pumps and similar rotating equipment. Serial No. 453,713; Feb. 9. Class 35.

Croasdale & Deangelis, Haverford Township, Pa. Windshields of transparent material not including glass. Serial No. 455,621; Feb. 9. Class 19.

Crown Packing Company. (See Bunn, John T.)

Dritz-Traum Company, Inc., New York, N. Y. Combination consisting of a laundry bag and a container equipped with pockets. Serial No. 456,920; Feb. 9. Class 2.

Duotone Company, New York, N. Y. Phonograph needles. Serial No. 452,687; Feb. 9. Class 36.

Duotone Company, Inc., New York, N. Y. Phonograph needles. Serial No. 449,447; Feb. 9. Class 36.

Eastman Kodak Company, Jersey City, N. J., and Rochester, N. Y. Photographic developers. Serial No. 445,385; Feb. 9. Class 6.

Electro Metallurgical Company, New York, N. Y. Ferrous metal alloys. Serial No. 456,505; Feb. 9. Class 14.

Empire Curtain Mfg. Co. (See Perlmutter, Samuel.)

Fairbanks Company, The, New York, N. Y. Plumbing and steamfitting valves. Serial No. 456,073; Feb. 9. Class 13.

Faultless Caster Corporation, Evansville, Ind. Caster wheels. Serial No. 456,384; Feb. 9. Class 13.

Flintkote Company, The, New York, N. Y. Bituminous roof insulation cement. Serial No. 449,256; Feb. 9. Class 12.

Food Machinery Corporation, San Jose, Calif. Potatoes. Serial No. 357,201; Feb. 9. Class 46.

Georgia Kaolin Company, Elizabeth, N. J. Clays used as extenders in protective paint coatings. Serial No. 456,365; Feb. 9. Class 16.

Glasco Products Company, Chicago, Ill. Glass rods, glass tubes, and glass containers. Serial No. 452,233; Feb. 9. Class 33.

Hammer-Sices, Inc., Chicago, Ill. Ladies' and misses' coats. Serial No. 455,655; Feb. 9. Class 39.

Happy Mills, Memphis, Tenn. Feed for livestock, poultry, rabbits, etc. Serial No. 456,287; Feb. 9. Class 46.

Harris, Almeida, New York, N. Y. Collapsible bags. Seriel No. 456,532; Feb. 9. Class 3.

Hodder, George J., Oakland, Calif. Note paper in the nature of folders. Serial No. 446,837; Feb. 9. Class 37.

Holstein Rubber Products Company, Inc., The, Hartford, Conn. Floor tiles. Serial No. 456,850; Feb. 9. Class 12.

Hunziker, Max H., New York, N. Y. Ladies' handbags, purses, bill folds, etc. Serial No. 456,888; Feb. 9. Class 3.

Hutchens Industries, Eau Claire, Wis. Oil filters and parts thereof. Serial No. 457,392; Feb. 9. Class 23.

Italian Swiss Colony, San Francisco, Calif. Wines. Serial No. 453,546; Feb. 9. Class 47.

International Nickel Company, Inc., The, New York, N. Y. Sheet, strip, and wire rods. Serial No. 453,384; Feb. 9. Class 14.

Kansas Building Materials Company, Topeka, Kans. Concrete curing compound. Serial No. 456,270; Feb. 9. Class 12.

Kearney & Trecker Corporation, West Allis, Wis. Cutters for machine tools. Serial No. 449,421; Feb. 9. Class 23.

Kellogg Company, Battle Creek, Mich. Food for dogs and other carnivorous animals. Serial No. 457,246; Feb. 9. Class 46.

Lake Shore Engineering Company, Iron Mountain, Mich. Cargo winches. Serial No. 456,776; Feb. 9. Class 23.

Lannett Company, Incorporated, The, Philadelphia, Pa. Dermatological preparation. Serial No. 454,556; Feb. 9. Class 6.

Lehn & Fink Products Corporation, Bloomfield, N. J. Perfume and eau de cologne. Serial No. 457,277; Feb. 9. Class 6.

Les Parfums Worth de Paris, Inc., New York, N. Y. Perfume, toilet water, eau de cologne, etc. Serial No. 457,577; Feb. 9. Class 6.

Lockport Cotton Batting Co., Lockport, N. Y. Fireproofed cotton sheet insulation material. Serial No. 456,945; Feb. 9. Class 12.

Lubow, Bernard, New York, N. Y. Glass bottle novelties displaying a coin therein used as talismans. Serial No. 454,660; Feb. 9. Class 50.

Maus, Geo. H., Inc., Amsterdam, N. Y. Bamboo rug poles. Serial No. 456,401; Feb. 9. Class 50.

McDonnell, Everett N., doing business as McDonnell & Miller, Chicago, Ill. Boiler controls and regulators. Serial No. 452,309; Feb. 9. Class 13.

McKee Glass Company, Jeannette, Pa. Glass dish. Serial No. 456,218; Feb. 9. Class 33.

McKelvy, Alfred D., Company, New York, N. Y. Toilet kit containing soap. Serial No. 456,639; Feb. 9. Class 4.

Montgomery, Wm., Company, Philadelphia, Pa. Canned dog food. Serial No. 457,278; Feb. 9. Class 46.

National Enameling & Stamping Company, Milwaukee, Wis. Metal cooking hollow ware and metal kitchenware. Serial No. 446,434; Feb. 9. Class 13.

Parker Brothers Inc., Portland, Maine, and Salem, Mass. Game played with a spinning bobbin. Serial No. 454,219; Feb. 9. Class 22.

Pennsylvania Coal Products Company, Petrolia, Pa. Snythetic resins, organic resinous condensation products, polyhydroxybenzene resin condensation products, etc. Serial No. 456,542; Feb. 9. Class 1.

Perlmutter, Samuel, doing business as Empire Curtain Mfg. Co., Boston, Mass. Window curtains, draperies, and bedspreads. Serial No. 455,,733; Feb. 9. Class 42.

Philco Corporation, Philadelphia, Pa. Fibre wrenches, wrench sockets, screw drivers, etc. Serial No. 454,609; Feb. 9. Class 23.

Philco Corporation, Philadelphia, Pa. Glass trays and glass shelving. Serial No. 454,378; Feb. 9. Class 33.

Philco Corporation, Philadelphia, Pa. Lacquers, stains, paint thinners, etc. Serial No. 454,608; Feb. 9. Class 16.

Philco Corporation, Philadelphia, Pa. Sandpaper and rubbing compound. Serial No. 449,151; Feb. 9. Class 4.

Queen Anne Undies, Inc., New York, N. Y. Ladies' apparel. Serial No. 457,229; Feb. 9. Class 39.

Remington Rand Inc., Buffalo, N. Y. Drawing fixture for supporting duplicator stencils. Serial No. 457,284; Feb. 9. Class 26.

Rohdin, Marjorie M., Glen Ridge, N. J. Flexible walled bags. Serial No. 456,961; Feb. 9. Class 2.

Rubber City Manufacturing Co., The, Akron, Ohio. Chemical dye preparation. Serial No. 457,286; Feb. 9. Class 6.

Ruberoid Co., The, Boundbrook, N. J., and New York, N. Y. Thermal insulation material. Serial No. 456,512; Feb. 9. Class 12.

Salvatori, Gertrud, doing business as Contact Lens Service, New York, N. Y. Contact lenses. Serial No. 447,672; Feb. 9. Class 26.
Simmons, Paul J., doing business as Simmons Company, New York, N. Y. Medicinal tonics. Serial No. 455,445; Feb. 9. Class 6.
Southern Mills, Incorporated, Atlanta, Ga. Cotton flannel, knitted cotton padding, cotton cover cloth, etc. Serial No. 454,124; Feb. 9. Class 42.
Standard Cotton Products Co., Inc., Flint, Mich. Insulation batts. Serial No. 456,516; Feb. 9. Class 12.
Stanley Home Products, Inc., Westfield, Mass. Hair and tooth brushes. Serial No. 456,133; Feb. 9. Class 29.
Sugar Beet Products Company, Saginaw, Mich. Powdered hand soap. Serial No. 456,439; Feb. 9. Class 4.
Sulflo, Inc., Elizabeth, N. J. Metal cutting lubricating compound. Serial Nos. 450,119–20; Feb. 9. Class 15.
Sulflo, Inc., Elizabeth, N. J. Metal cutting lubricating compound. Serial No. 450,128; Feb. 9; Class 15.
Toledo Scale Company, Toledo, Ohio. Weighing scales. Serial No. 457,177; Feb. 9; Class 26.
Tremco Manufacturing Company, The, Cleveland, Ohio. Paint. Serial No. 456,758; Feb. 9; Class 16.
Union Oil Company of California, Los Angeles, Calif. Lubricating oils. Serial No. 457,376; Feb. 9. Class 15.
United-Carr Fastener Corporation, Cambridge, Mich. Separable fasteners particularly of the rotary operative type variously applied to articles of manufacture in the industrial arts. Serial No. 455,990; Feb. 9. Class 13.
United States Pumice Supply Co., Los Angeles, Calif. Blocks of natural pumice stone. Serial Nos. 456,641–2; Feb. 9. Class 4.
Universal Unit Power Shovel Corp., Milwaukee, Wis. Power shovels. Serial No. 444,842. Feb. 9. Class 23.
Vandewart, Mark, Company Inc., New York, N. Y. Stomach bitters. Serial No. 457,519; Feb. 9. Class 6.
Warfield, Rose, doing business as C Y C Products Co., Chicago, Ill. Liquid cough medicine. Serial No. 456,950; Feb. 9. Class 6.
Whellkin Coat Company, Inc., New York, N. Y. Suits, coats, and sport coats for ladies. Serial No. 457,179; Feb. 9. Class 39.
Wilson Manufacturing Co., Boston, Mass. Pocketbooks, billfolds and combined pass case, and billfolds. Serial No. 457,262; Feb. 9. Class 3.
Wilson, S. I. (See Connell, R., and Wilson.)
Zallea Brothers & Johnson, Wilmington, Del. Pipe expansion joints, metal piping, and valves. Serial No. 456,299; Feb. 9. Class 13.
Zurn, J. A., Manufacturing Company, Erie, Pa. Grease traps. Serial No. 453,024; Feb. 9. Class 13.

LIST OF REGISTRANTS OF TRADE-MARKS

Addressograph-Multigraph Corporation, Cleveland, Ohio. Planographic printing plates. 399,970; Feb. 9; Serial No. 454,566; published Dec. 1, 1942. Class 50.
Allied Mills, Inc., Chicago, Ill. Feeds for live poultry. 399,947; Feb. 9; Serial No. 450,013; published Nov. 17, 1942. Class 46.
American Bleached Goods Company, Inc., New York, N. Y. Cotton piece goods. 399,942; Feb. 9; Serial No. 450,152; published Dec. 1, 1942. Class 42.
American Hair Felt Co., assignor to American Hair & Felt Company, Chicago, Ill. Felt. 169,084; renewed June 5, 1943.
American Hair Felt Company, assignor to American Hair & Felt Company, Chicago, Ill. Felt insulating material. 169,332; renewed June 12, 1943.
American Optical Company. (See De Zeng, Henry L., assignor.)
American Optical Company, The, Southbridge Mass. Optical goods, and particularly spectacles, eyeglasses, and other ophthalmic mountings and parts thereof. 162,668; renewed Dec. 26, 1942.
Anti-Hydro Waterproofing Company, Newark, N. J. Liquid for use with concrete and cement mixtures. 169,330; renewed June 12, 1943.
Arcade Malleable Iron Co., The, Worcester, Mass. Iron alloy castings and ferrous metals and alloys. 399,979; Feb. 9; Serial No. 454,995; published Nov. 24, 1942. Class 14.
Art Crayon Co., Inc., Brooklyn, N. Y. Artists' materials. 399,959; Feb. 9; Serial No. 453,355; published Dec. 1, 1942. Class 37.
Associated Growers, Incorporated, Lodi, Calif. Fresh grapes. 169,263; renewed June 12, 1943.
Associated Laboratories, Inc., doing business as Vitamin-Quota, Long Island City, N. Y. Mineral products. 400,025; Feb. 9. Class 6.
Aunt Jemima Mills Company, St. Joseph, Mo., assignor to The Quaker Oats Company, Chicago, Ill. Prepared and semi-prepared breakfast cereals. 167,387; renewed May 1, 1943.
Aunt Jemima Mills Company, St. Joseph, Mo., assignor to The Quaker Oats Company, Chicago, Ill. Wheat flour. 167,394; renewed May 1, 1943.
B-Z-B Honey Company. (See Schumacher, H. H.)
Baer Company, The, Leighton, Pa. Thrown silk. 166,924; renewed Apr. 17, 1943.
Bailey, George S., Hat Company, Inc., Los Angeles, Calif. Men's hats. 399,997; Feb. 9; Serial No. 455,743; published Nov. 24, 1942. Class 39.
Baker R & L Company, The, Cleveland, Ohio, by change of name to The Baker-Raulang Company. Elevating industrial trucks and structural parts thereof. 169,206; renewed June 12, 1943.
Barber Asphalt Paving Company, The, Philadelphia, Pa., assignor to Barber Asphalt Corporation, Barber, N. J. Waterproof roofing sheets, and shingles. 163,017; renewed Jan 2, 1943.
Barber Asphalt Paving Company, The, Philadelphia, Pa., assignor to Barber Asphalt Corporation, Barber, N. J. Paints, mineral spirits, and paint oil. 168,635; renewed May 29, 1943.
Bausch & Lomb Optical Company, Rochester, N. Y. Apparatus for testing, exercising, and training the eyes. 399,961; Feb. 9; Serial No. 453,591; published July 28, 1942. Class 26.
Beacon Manufacturing Company. (See Salt's Textile Manufacturing Company, The, assignor.)
Bear Creek Orchards. (See Holmes Brothers.)
Beard, Robert J., doing business as Tetley-Wessinger Company, Washington, D. C. Vitamin tonic. 399,960; Feb. 9; Serial No. 453,484; published Nov. 17, 1942. Class 6.
Beck, Charles, Inc., Lawrence, Mass. Fabric hose. 167,444; renewed May 1, 1943.
Bee Line Honey Co. (See Schumacher, H. H.)
Behr-Manning Corporation, Troy, N. Y. Coated abrasives. 400,008; Feb. 9; Serial No. 456,137; published Dec. 1, 1942. Class 4.
Bemis Bro. Bag Co., St. Louis, Mo. Burlap bags. 169,435; renewed June 19, 1943.
Bentkamp, August, New York, N. Y. Ear muffs. 400,017; Feb. 9. Class 39.
Berger, Harry, doing business as Harry Berger Shirt Company, to Kaylon Incorporated, New York, N. Y., successor. Men's and boys' shirts. 166,862; renewed Apr. 17, 1943.
Bertlyn Corporation, New York, N. Y. Hats for women and misses. 399,975; Feb. 9; Serial No. 454,846; published Nov. 24, 1942. Class 39.
Bianchini Ferier, Inc., New York, N. Y. Piece goods. 399,989; Feb. 9; Serial No. 455,583; published Nov. 24, 1942. Class 42.
Bianchini Ferier, Inc., New York, N. Y. Piece goods. 399,990; Feb. 9; Serial No. 455,585; published Nov. 24, 1942. Class 42.
Bick, Harry S., doing business as Kramer & Bick, New York, N. Y. Sterling silver jewelry. 399,966; Feb. 9; Serial No. 454,001; published Dec. 1, 1942. Class 28.
Bobshire Coats, Inc., New York, N. Y. Women's and misses' coats, suits, coat and suit ensembles, etc. 400,034; Feb. 9. Class 39.
Bora-Quin Chemical Company. (See Harden, E. C.)
Borden Company, The, New York, N. Y. Relish cocktail spread, pineapple cocktail spread, pimento cocktail spread, etc., and ice cream. 399,946; Feb. 9; Serial No. 450,707; published Dec. 1, 1942. Class 46.
Border Packing Corporation, Brownsville, Tex. Canned citrus juices. 399,967; Feb. 9; Serial No. 454,184; published Nov. 24, 1942. Class 45.
Boyd-Richardson Company, St. Louis, Mo. Men's hats. 399,969; Feb. 9; Serial No. 454,500; published Nov. 24, 1942. Class 39.
Bradford Dyers' Association, Limited, The, Bradford, England. Piece goods. 168,791; renewed May 29, 1943.
Braun, Geo. P., Company, Chicago, Ill. Vitamin fortifier. 399,951; Feb. 9; Serial No. 451,708; published Apr. 28, 1942. Class 6.
Brightwater Paper Company, Dover, Del., and Adams, Mass. Writing paper. 399,957; Feb. 9; Serial No. 453,137; published Dec. 1, 1942. Class 37.
Brown Company, Portland, Maine, to Brown Company, Berlin, N. H. Wrapping paper. 166,931–2; renewed Apr. 17, 1943.
Bruce's Juices, Inc., Tampa, Fla. Fruit and vegetable extracts and juices. 399,948; Feb. 9; Serial No. 451,588; published June 2, 1942. Class 46.
Carpenter Steel Company, The, Reading, Pa. Tool steel. 399,981; Feb. 9; Serial No. 455,096; published Nov. 24, 1942. Class 14.
Carter Coal Company, New York, N. Y. Coal. No. 399,936; Feb. 9; Serial No. 447,388; published Dec. 1, 1942. Class 1.
Champagne Paper Corporation, Pisgah Forest, N. C. Cigarette paper. 399,962; Feb. 9; Serial No. 453,747; published Nov. 3, 1942. Class 8.

Champagne Paper Corporation, Pisgah Forest, N. C. Cigarette paper. 399,987; Feb. 9; Serial No. 455,425; published Dec. 1, 1942. Class 8.
Champion Fibre Company, The, Canton, N. C., assignor to The Champion Paper and Fibre Company, Hamilton, Ohio. Leather filler. 167,905; renewed May 8, 1943.
Chanel, Inc., New York, N. Y. Toilet soap. 400,004; Feb. 9; Serial No. 455,839; published Dec. 1, 1942. Class 4.
Chicago Varnish Company, Chicago, Ill., assignor, by mesne assignments, to E. I. du Pont de Nemours and Company, Wilmington, Del. Varnishes, stains, driers, etc. 22,394; re-renewed Jan. 31, 1943.
Chief Two Moon Herb Company, The, assignor to Helen G. Meridas, Waterbury, Conn. Pharmaceutical preparations. 168,844; renewed May 29, 1943.
Childress, Bessie A. (See Hughes, William S.)
Cincinnati Tailoring Co., also doing business as "Schaefer Tailoring Company," Cincinnati, Ohio. Men's clothing. 400,031; Feb. 9. Class 39.
Clark, J. R., Co., The, Minneapolis, Minn. Ironing tables. 399,928; Feb. 9; Serial No. 439,512; published Sept. 23, 1942. Class 24.
Clough Brengle Co., Chicago ,Ill. Electric testing equipment—electro-chemical equipment. 399,940; Feb. 9; Serial No. 448,692; published Dec. 1, 1942. Class 26.
Clough Brengle Co., Chicago, Ill. Generators of electric signals in radio, audio and carrier frequencies, and transmission equipment for telephone circuits. 399,963; Feb. 9; Serial No. 453,788; published Dec. 1, 1942. Class 21.
Coated Products Corporation, Verona, Pa. Roofing, roof valleys and gutters, and siding. 399,964; Feb. 9; Serial No. 453,824; published Dec. 1, 1942. Class 12.
Columbus Coated Fabrics Corporation, Columbus, Ohio. Woven textile fabric. 399,932; Feb. 9; Serial No. 445,486; published Dec. 1, 1942. Class 50.
Cook, John, & Sons, Inc., Chicago, Ill., assignor to The Tupman Thurlow Co., Inc., New York, N. Y. Canned meats, canned vegetables, and canned combinations of meats and vegetables. 162,708; renewed Dec. 26, 1942.
Cook Paint & Varnish Company, North Kansas City, Mo. Paint. 399,992; Feb. 9; Serial No. 455,646; published Dec. 1, 1942. Class 16.
Cox, Rupert, doing business as Speed-Eez Company, Raleigh, N. C. Headache powders. 399,938; Feb. 9; Serial No. 447,631; published Mar. 17, 1942. Class 6.
Crane, Z. and W. M., assignors to Z. & W. M. Crane, Inc., Dalton, Mass. Writing paper, mailing envelopes, flat paper, etc. 163,466; renewed Jan. 16, 1943.
Crystal, David, Inc., New York, N. Y. Ladies' and misses' dresses and dress ensembles. 400,027; Feb. 9. Class 39.
Cuetara, Salvador, Boston, Mass. Shoes and slippers. 399,985; Feb. 9; Serial No. 455,253; published Nov. 24, 1942. Class 39.
Decatur Brewing Co., Decatur, assignor to Pabst Brewing Company, Peoria Heights, Ill. Malt extract in syrup form. 169,597; renewed June 26, 1943.
Decker Manufacturing Company, Keokuk, Iowa. Hog rings. 400,006; Feb. 9; Serial No. 455,910; published Dec. 1, 1942. Class 13.
Delta Brush Mfg. Corp., New York, N. Y. Paint brushes including those with quill handles. 399,954; Feb. 9; Serial No. 452,466; published Dec. 1, 1942. Class 29.
Denney, Frances, Philadelphia, Pa. Lipsticks, cream rouge, compact rouge, etc. 400,005; Feb. 9; Serial No. 455,885; published Nov. 17, 1942. Class 6.
De Zeng, Henry L., trading as De Zeng-Standard Co., Camden, N. J., assignor, by mesne assignments, to American Optical Company, Southbridge, Mass. Eye, ear, nose, and throat diagnostic instruments. 162,719; renewed Dec. 26, 1942.
Dribben, Joseph N., La Crosse, Wis. Photographic film. 399,982; Feb. 9; Serial No. 455,116; published Dec. 1, 1942. Class 26.
Dudley Paper Company, The, Lansing, Mich. Kraft paper for wrapping purposes. 168,856; renewed May 29, 1943.
Du Pont, E. I., de Nemours and Company. (See Chicago Varnish Company, assignor.)
Du Pont, E. I., de Nemours and Company, Wilmington, Del. Intermediate fr dyeing processes. 163,057; renewed Jan. 2, 1943.
Edmilton Corporation, Milwaukee, Wis. Electric hand irons. 400,000; Feb. 9; Serial No. 455,818; published Dec. 1, 1942. Class 21.
Ely & Walker Dry Goods Company. (See Lindeke, Warner & Sons, Incorporated, assignor.)
Ely & Walker Dry Goods Company, St. Louis, Mo. Misses' and juniors' dresses. 400,028; Feb. 9. Class 39.
Enterprise Oil Co. (See Hower, Frank B.)
Ferer, Kay, Inc., St. Louis, Mo. Ladies' and juniors' dresses, skirts, blouses, etc. 400,020-1; Feb. 9. Class 39.
Fink, Milton, New York, N. Y. Diathermy machines for therapeutic uses. 400,029; Feb. 9. Class 44.
Foster, Mina, doing business as Foster Laboratories, Lansing, Mich. Preparations for the treatment of foot ailments. 399,996; Feb. 9; Serial No. 455,726; published Nov. 24, 1942. Class 6.
Fownes Brothers & Co., London, England, assignor to Fownes Brothers & Co. Incorporated, Gloversville, Amsterdam, and New York, N. Y. Gloves. 23,017; re-renewed May 16, 1943.
French, R. T., Company, The. (See Reckitts (U. S. A.) Ltd., assignor.)
Friedman-Marks Clothing Company, Inc., Richmond, Va. Men's suits and coats. 400,015; Feb. 9. Class 39.
Galen Company, Berkeley, Calif. Non-cereal food product. 399,953; Feb. 9; Serial No. 452,071; published Dec. 1, 1942. Class 46.
Galvin Manufacturing Corporation, Chicago, Ill. Radio receiving apparatus, combination radio receiving and electric phonograph apparatus with and without record changing mechanism, etc., and parts of each. 399,935; Feb. 9; Serial No. 447,018; published Dec. 1, 1942. Class 21.
Grady, M. J., Company, Incorporated, The, assignor to The Grady-Travers Company, Incorporated, New York, N. Y. Cordage. 163,078; renewed Jan. 2, 1943.
Gotham Instrument Company. (See Halpern, Walter J.)
Grady, M. J., Company, Incorporated, The, assignor to The Grady-Travers Company, Incorporated, New York, N. Y. Threads and yarns. 167,770; renewed May 8, 1943.
Grady, M. J., Company, Incorporated, The, assignor to The Grady-Travers Company, Incorporated, New York, N. Y. Twine and rope or cordage. 168,224; renewed May 15, 1943.
Guttman, Joseph, & Bros., New York, N. Y. Ladies' and misses' knitted dresses, blouses, skirts, etc. 400,033; Feb. 9. Class 39.
Halpern, Walter J., doing business as Gotham Instrument Company, New York, N. Y. Thermometers for use in connection with controllers for regulating temperatures for fluids of all types. 399,965; Feb. 9; Serial No. 453,940; published Dec. 1, 1942. Class 26.
Hamilton Laboratories, Inc., The, Hamilton, Ohio. Germicide for control of pulp and paper mill slimes. 399,993; Feb. 9; Serial No. 455,654; published Nov. 17, 1942. Class 6.
Harden, E. C., doing business as Bora-Quin Chemical Company, Little Rock, Ark. Antiseptic vaginal jelly. 399,931; Feb. 9; Serial No. 443,980; published Sept. 16, 1941. Class 6.
Hart, Schaffner & Marx, Chicago, Ill. Men's and boys' suits, coats, overcoats, etc. 400,023; Feb. 9. Class 39.
Hauck Manufacturing Company, Brooklyn, N. Y. Heating apparatus. 169,208; renewed June 12, 1943.
Havflich, Walter M., New York, N. Y. Ladies' hats. 399,955; Feb. 9; Serial No. 452,775; published Dec. 1, 1942. Class 39.
Heller, B., & Company, Chicago, Ill. Chemical preparation. 168,235; renewed May 15, 1943.
Hep, Inc. (See Reynolds, R. J., Jr., assignor.)
Hess, Goldsmith & Co. Inc., New York, N. Y. Piece goods. 399,958; Feb. 9; Serial No. 453,331; published Nov. 24, 1942. Class 42.
Hessberg, Magnus, Inc., Richmond, Va. Leather. 168,575; renewed May 29, 1943.
Holmes Brothers, doing business as Bear Creek Orchards, Medford, Oreg. Fresh fruits. 400,009; Feb. 9; Serial No. 456,183; published Dec. 1, 1942. Class 46.
Hower, Frank B., doing business as Enterprise Oil Co., assignor to Enterprise Oil Company, Inc., Buffalo, N. Y. Lubricating oils and greases. 163,090; renewed Jan. 2, 1943.
Hughes, William S., doing business as The Pre Ven Shun Laboratories, to Bessie A. Childress, doing business as The Pre Ven Shun Laboratories, Kansas City, Mo., successor. Prophylactic ointment. 168,845; renewed May 29, 1943.
Idaho Potato Starch Co., Blackfoot, Idaho. Potato starch for industrial purposes. 400,030; Feb. 9. Class 6.
International Shoe Co., St. Louis, Mo. Boots and shoes. 399,998; Feb. 9; Serial No. 455,757; published Dec. 1, 1942. Class 39.
Jergens, Andrew, Company, The, Cincinnati, Ohio. Toilet soap. 165,568; renewed Mar. 13, 1943.
Johnson, Darrell M., Thomson, Ga. Automobile service and maintenance equipment. 399,976; Feb. 9; Serial No. 454,851; published Dec. 1, 1942. Class 50.
Jones, Casey, Inc. (See Maryland Company, The, assignor.)
Kaylon Incorporated. (See Berger, Harry.)
Kayser, Julius, & Co., New York, N. Y. Ladies' fabric gloves. 400,024; Feb. 9. Class 39.
Keiley Island Lime and Transport Company, The, Cleveland, Ohio. Acoustical lime and acoustical plaster. 399,950; Feb. 9; Serial No. 451,680; published Dec. 1, 1942. Class 12.
Kimble Glass Company, Chicago, Ill., and Vineland, to Kimble Glass Company, Vineland, N. J. Graduated chemical and laboratory glassware. 164,311; renewed Feb. 20, 1943.
Kleen-Heet, Incorporated. (See Winslow Boiler Engineering Co.)
Kohler Co., Kohler, Wis. Electric generating plants. 167,671; renewed May 8, 1943.
Kramer & Bick. (See Bick, Harry S.)

Lady Esther, Ltd., Chicago, Ill. Face powder. 399,971; Feb. 9; Serial No. 454,636; published Nov. 24, 1942. Class 6.

Lanchester Motor Co. Ltd., The, to The Lanchester Motor Company Limited, Coventry, England. Automobiles, motor trucks, and motor cycles. 163,360; renewed Jan. 9, 1943.

Laycob Hat Company, St. Louis, Mo. Women's hats. 399,952; Feb. 9; Serial No. 451,770; published Nov. 24, 1942. Class 39.

Lazarus, A. S., & Co., Inc., New York, N. Y. Infants' and children's wearing apparel. 399,949; Feb. 9; Serial No. 451,627; published Dec. 1, 1942. Class 39.

Liberty & Co. Limited, London, England. Piece goods of cotton. 169,602; renewed June 26, 1943.

Lindeke, Warner & Sons, Incorporated, St. Paul, Minn., assignor, by mesne assignments, to Ely & Walker Dry Goods Company, St. Louis, Mo. Men's and boys' overalls and coveralls. 168,330; renewed May 22, 1943.

Liquid Carbonic Corporation, The, Chicago, Ill. Acetylene regulating valves. 400,001; Feb. 9; Serial No. 455,823; published Dec. 1, 1942. Class 13.

Liquid Carbonic Corporation, The, Chicago, Ill. Gas welding, cutting, brazing, etc. 400,002; Feb. 9; Serial No. 455,824; published Dec. 1, 1942. Class 34.

Lufkin Rule Company, The, Saginaw, Mich. Tape measures. 400,035; Feb. 9. Class 26.

Magnaflux Corporation, Chicago, Ill. Fluorescent oil, oil concentrates and powders for use in testing articles for flaws and defects. 399,999; Feb. 9; Serial No. 455,801; published Nov. 24, 1942. Class 6.

Majestic Manufacturing Company, St. Louis, Mo. Heating apparatus. 165,083; renewed Mar. 6, 1943.

Mallory, P. R., & Co., Inc., Indianapolis, Ind. Electric contacting elements. 399,945; Feb. 9; Serial No. 450,510; published Dec. 1, 1942. Class 21.

Marine Optical Mfg. Co., Roslindale, Boston, Mass. Sunglasses and optical frames. 399,972; Feb. 9; Serial No. 454,639; published Dec. 1, 1942. Class 26.

Maryland Company, The, assignor to Casey Jones, Inc., Baltimore, Md. Children's overall play suits. 168,084; renewed May 15, 1943.

Mayer, H. J., and Sons Company, Chicago, Ill. Compound or preparation for curing preserved meats. 399,941; Feb. 9; Serial No. 449,911; published Feb. 24, 1942. Class 6.

McCutcheon, James, & Company, New York, N. Y. Knitted, netted, and textile fabrics. 166,915; renewed Apr. 17, 1943.

Men's Hats, Inc., Baltimore, Md. Men's hats. 399,994; Feb. 9; Serial No. 455,660; published Nov. 24, 1942. Class 39.

Meridas, Helen G. (See Chief Two Moon Herb Company, The, assignor.)

Merrimac Battery Plate Co. Inc., Louisville, Ky. Storage batteries. 162,312; renewed Dec. 12, 1942.

Meyer & Stüdeli, Société Anonyme, Soleure, Switzerland. Watches, clocks, and parts thereof. 158,262; renewed Aug. 29, 1942.

Mine Safety Appliances Company, Pittsburgh, Pa. Protective wearing apparel for miners, industrial workers, firefighters, etc. 399,929; Feb. 9; Serial No. 441,831; published Nov. 24, 1942. Class 39.

Miner's, Inc., New York, N. Y. Liquid makeup for the body, particularly the limbs. 399,933; Feb. 9; Serial No. 446,210; published May 26, 1942. Class 6.

Moseley, William M., Repton, Ala. Preparation for the treatment of pellagra. 399,988; Feb. 9; Serial No. 455,538; published Nov. 24, 1942. Class 6.

National Mattress Company, Huntington, W. Va. Mattresses. 400,007; Feb. 9; Serial No. 456,025; published Dec. 1, 1942. Class 32.

National Retailer-Owned Grocers, Inc., Chicago, Ill. Canned vegetables, canned fruits, and canned fruit juices. 400,010; Feb. 9; Serial No. 456,194; published Dec. 1, 1942. Class 46.

Newton Horse Medicine Company, The, Detroit, Mich. Horse medicine. 399,978; Feb. 9; Serial No. 454,988; published Nov. 17, 1942. Class 6.

Niagara Blower Company, Buffalo and New York, N. Y. Liquid coolers or heat exchangers. 400,014; Feb. 9. Class 34.

Nicolet, Theodore, doing business as Old Quebec Soup Co., Rutland, Vt. French Canadian style pea soup. 400,016; Feb. 9. Class 46.

Norito Co., The, Chicago, Ill. Medicinal preparation. 399,974; Feb. 9; Serial No. 454,761; published Nov. 17, 1942. Class 6.

Old Quebec Soup Co. (See Nicolet, Theodore.)

Old Town Ribbon & Carbon Co. Inc., Brooklyn, N. Y. Coated duplicating sheets. 399,986; Feb. 9; Serial No. 455,379; published Nov. 24, 1942. Class 11.

Pabst Brewing Company. (See Decatur Brewing Co., assignor.)

Pabst Brewing Company. (See Premier Malt Products Co. of Ohio, Inc., assignor.)

Pabst Brewing Company. (See Quaker City Home Beverage Co., assignor.)

Pacific Clay Products, Los Angeles, Calif. Electrical porcelain insulators. 399,983; Feb. 9; Serial No. 455,124; published Dec. 1, 1942. Class 21.

Parke, Davis & Company, Detroit, Mich. Laxative and cathartics. 168,830; renewed May 29, 1943.

Perlitch, Leea M., New York, N. Y. Combined blouse and slip, and ensemble dresses. 400,019; Feb. 9. Class 39.

Perlitch, Leea M., New York, N. Y. Combined blouse and slip, and ensemble dresses. 400,022; Feb. 9. Class 39.

Premier Malt Products Co. of Ohio, Inc., Chicago, Ill., and Steubenville, Ohio, assignor to Pabst Brewing Company, Peoria, Ill. Nonalcoholic, maltless, fruit-flavored concentrate for beverage purposes. 167,048; renewed Apr. 24, 1943.

Pre Ven Shun Laboratories. (See Hughes, William S.)

Prince Matchabelli, Inc., New York, N. Y. Perfume, cologne, and toilet water. 399,991; Feb. 9; Serial No. 455,630; published Nov. 17, 1942. Class 6.

Pruskauer, Manny, Inc., Chicago, Ill. Fur coats, fur jackets, and fur muffs. 399,968; Feb. 9; Serial No. 454,201; published Dec. 1, 1942. Class 39.

Quaker City Home Beverage Co. (See Stoy, Andrew F.)

Quaker Oats Company, The. (See Aunt Jemima Mills Company, assignor.)

Radiator Specialty Company, Charlotte, N. C., Los Angeles, Calif., and Toronto, Ontario, Canada. Liquid compound for application to ignition wires to protect them and make them water-proof. 399,977; Feb. 9; Serial No. 454,951; published Dec. 1, 1942. Class 21.

Reckitts (U. S. A.), Ltd., New York, N. Y., and New Brunswick, N. J., assignor, by mesne assignments, to The R. T. French Company, Rochester, N. Y. Laundry blue. 165,996; renewed May 27, 1943.

Reynolds, R. J., Jr., assignor to Hep, Inc., Atlanta, Ga. Non-alcoholic maltless beverage. 399,930; Feb. 9; Serial No. 442,638; published July 22, 1941. Class 45.

Rhode Island Laboratories, Inc., West Warwick, R. I. Luminous, fluorescent, phosphorescent, and radium-active pigments. 399,944; Feb. 9; Serial No. 450,459; published Sept. 1, 1942. Class 16.

Rhodes, James H., & Company, Chicago, Ill. Steel wool, also soap. 163,955; renewed Feb. 6, 1943.

Rieser, N., Company, Inc., The, now by change of name The Rieser Company, Inc., by change of name to The Rieser Company, New York, N. Y. Soap. 169,523; renewed June 19, 1943.

Rieser, N., Company, Inc., The, now by change of name The Rieser Company, Inc., by change of name to The Rieser Company, New York, N. Y. Soap. 169,525; renewed June 19, 1943.

Saks & Company, New York, N. Y. Misses' and women's gloves made of leather with a suede finish. 400,026; Feb. 9. Class 39.

Salt's Textile Manufacturing Company, The, Bridgeport, Conn., and New York, N. Y., assignor, by mesne assignments, to Beacon Manufacturing Company, Swannanoa, N. C. Clothing. 169,293; renewed June 12, 1943.

"Schaefer Tailoring Company." (See Cincinnati Tailoring Co.)

Schumacher, H. H., doing business as B-Z-B Honey Company and also as Bee Line Honey Co., Alhambra, Calif. Honey. 399,937; Feb. 9; Serial No. 447,577; published Apr. 21, 1942. Class 46.

Scully, Edwin N., Chicago, Ill. Cellulose acetate film, coated (matte finish). 400,013; Feb. 9. Class 50.

Sea Pride Packing Corporation, Ltd., San Francisco, Calif. Canned fish. 400,011; Feb. 9; Serial No. 456,276; published Dec. 1, 1942. Class 46.

Seven-Up Company, The, St. Louis, Mo. Beverages. 399,995; Feb. 9; Serial No. 455,712; published Nov. 24, 1942. Class 45.

Sew-and-So Company, The, Kansas City, Kans. Coiffure needle and strand for use in setting hair. 399,956; Feb. 9; Serial No. 452,789; published Dec. 1, 1942. Class 40.

Sinclair Refining Company. (See Union Petroleum Company, assignor.)

Sirota, George, & Company, Inc., New York, N. Y. Vegetable salad and cooking oils. 399,934; Feb. 9; Serial No. 446,670; published Nov. 24, 1942. Class 46.

Smith Tablet Company, Inc., The, Holyoke, Mass., assignor to Western Tablet & Stationery Corporation, Dayton, Ohio. Tablets and book covers. 169,366; renewed June 12, 1943.

Souza Bros. Packing Co., Santa Maria, Calif. Fresh vegetables. 400,018; Feb. 9. Class 46.

Speed-Eez Company. (See Cox, Rupert).

Stanley Works, The, New Britain, Conn. Tools. 168,149; renewed May 15, 1943.

Stanley Works, The, New Britain, Conn. Tools. 168,225; renewed May 15, 1943.

Stanley Works, The, New Britain, Conn. Hardware. 168,943; renewed May 29, 1943.

Stanley Works, The, New Britain, Conn. Hardware. 168,947; renewed May 29, 1943.

Stanley Works, The New Britain, Conn. Rules, levels, squares, etc. 169,067; renewed June 5, 1943.

Stanley Works, The, New Britain, Conn. Rules, levels, squares, etc. 169,080; renewed June 5, 1943.

Steen, John A., Varnish Company, Chicago, Ill. Rapid-drying varnish-binder and a rapid-drying varnish. 167,187; renewed Apr. 24, 1943.

Stein, A., & Company, Chicago, Ill. Dress shields. 168,904; renewed May 29, 1943.

Stockton Textile Corporation, New York, N. Y. Rayon piece goods. 399,984; Feb. 9; Serial No. 455,247; published Dec. 1, 1942. Class 42.

Stoy, Andrew F., doing business as Quaker City Home Beverage Co., Philadelphia, Pa., assignor to Pabst Brewing Company, Peoria Heights, Ill. Malt extract for food purposes. 166,103; renewed Mar. 27, 1943.

Straws, Inc., New York, N. Y. Hats, hat bodies, hat linings, etc. 399,973; Feb. 9; Serial No. 454,744; published Dec. 1, 1942. Class 39.
Strom, Collum & Hoppe, San Francisco, Calif. Men's and boys' knitted and textile products. 400,012; Feb. 9. Class 39.
Stuart, Keith & Co., Inc., to The Stuart-Keith Manufacturing Company, Baltimore, Md., successor. Overalls, work shirts, and rompers. 163,973; renewed Feb. 6, 1943.
Sturgess Company, The, Meridian, Miss. Horse and mule feed, cow feed, cattle feed, etc. 167,889; renewed May 8, 1943.
Sullivan Machinery Company, Boston, Mass., and Chicago, Ill., to Sullivan Machinery Company, Boston, Mass., and Michigan City, Ind. Mining machines, hoisting mechanism, grinders, etc. 164,992; renewed Feb. 27, 1943.
Synthetic Plastics Corp., New York, N. Y. Plastic buckles and garment clasp supporter hooks. 400,032; Feb. 9. Class 40.
Tetley-Wessinger Company. (See Beard, Robert J.)
Toch Brothers, New York, assignors to Toch Brothers, Incorporated, assignor to Toch Brothers, Incorporated, Staten Island, N. Y. Varnishes and paint enamels. 164, 509; renewed Feb. 20, 1943.
Tribune Company, The, to Tribune Company, Chicago, Ill. Newspaper articles. 167,615; renewed May 1, 1943.
Tupman Thurlow Co., Inc., Inc., The. (See Cook, John, & Sons, Inc., assignor.)
Union Petroleum Company, Philadelphia, Pa., assignor to Sinclair Refining Company, New York, N. Y. Oils for heating purposes. 167,767; renewed May 8, 1943.
United States Gypsum Company, Chicago, Ill. Gypsum board. 400,003; Feb. 9; Serial No. 455,834; published Dec. 1, 1942. Class 12.
Valentine Laboratories, Inc., Chicago, Ill. Vitamin preparations. 399,939; Feb. 9; Serial No. 448,348; published Jan. 6, 1942. Class 6.
Vitamin-Quota. (See Associated Laboratories, Inc.)
Vivaudou, Victor, Tenafly, N. J. Perfumes. 399,943; Feb. 9; Serial No. 450,189; published Nov. 17, 1942. Class 6.
Walgreen Co., Chicago, Ill. Laxative pellets. 399,980; Feb. 9; Serial No. 455,057; published Oct. 20, 1942. Class 6.
Webley & Scott Limited, Birmingham, England. Revolvers, automatic pistols, and other small arms. 163,486; renewed Jan. 16, 1943.
Western Tablet & Stationery Corporation. (See Smith Tablet Company, Inc., The, assignor.)
Westmoreland Specialty Company, Grapeville, Pa. Pressed glassware. 165,555; renewed Mar. 13, 1943.
Willson Gogles, Inc., Reading, Pa., by change of name to Willson Products, Inc. Respirators and inhalers. 164,347; renewed Feb. 20, 1943.
Winslow Boiler & Engineering Co., to Kleen-Heat, Incorporated, Chicago, Ill., successor. Heat-generating plants comprising oil tanks, motors, fans, etc. 169,146; renewed June 12, 1943.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Coal. Carter Coal Company. 399,936; Feb. 9; Serial No. 447,388; published Dec. 1, 1942.
Leather. Magnus Hessberg, Inc. 168,575; renewed May 29, 1943.

CLASS 2

Bags, Burlap. Bemis Bro. Bag Co. 169,435; renewed June 19, 1943.

CLASS 4

Abrasives, Coated. Berh-Manning Corporation. 400,008; Feb. 9; Serial No. 456,137; published Dec. 1, 1942.
Leather filler. Champion Fibre Company. 167,905; renewed May 8, 1943.
Soap. N. Rieser Company. 169,523; renewed June 19 1943.
Soap. N. Rieser Company. 169,525; renewed June 19, 1943.
Soap, Toilet. Chanel, Inc. 400,004; Feb. 9; Serial No. 455,839; published Dec. 1, 1942.
Soap, Toilet. Andrew Jergens Company. 165,568; renewed Mar. 13, 1943.
Steel wool, also soap. James H. Rhodes & Company. 163,955; renewed Feb. 6, 1943.

CLASS 6

Antiseptic vaginal jelly. E. C. Harden. 399,931; Feb. 9; Serial No. 443,980; published Sept. 16, 1941.
Chemical preparation. B. Heller & Company. 168,235; renewed May 15, 1943.
Compound or preparation for curing preserved meats. H. J. Mayer and Sons Company. 399,941; Feb. 9; Serial No. 449,911; published Feb. 24, 1942.
Germicide for control of pulp and paper mill slimes. Hamilton Laboratories, Inc. 399,993; Feb. 9; Serial No. 455,654; published Nov. 17, 1942.
Intermediate for dyeing processés. E. I. du Pont de Nemours and Company. 163,057; renewed Jan. 2, 1943.
Laundry blue. Reckitts (U. S. A.) Ltd. 165,996; renewed May 27, 1943.
Laxatives and cathartics. Parke, Davis & Company. 168,830; renewed May 29, 1943.
Laxative pellets. Walgreen Co. 399,980; Feb. 9; Serial No. 455,057; published Oct. 20, 1942.
Lipsticks, cream rouge, compact rouge, etc. F. Denney. 400,005; Feb. 9; Serial No. 455,885; published Nov. 17, 1942.
Makeup for the body, particularly the limbs, Liquid Miner's, Inc. 399,933; Feb. 9; Serial No. 446,210; published May 26, 1942.
Medicinal preparation. Norito Co. 399,974; Feb. 9; Serial No. 454,761; published Nov. 17, 1942.
Medicine, Hore. Newton Horse Medicine Company. 399,978; Feb. 9; Serial No. 454,988; published Nov. 17, 1942.
Mineral products. Associated Laboratories, Inc. 400,025; Feb. 9.
Oil, oil concentrates and powders for use in testing articles for flaws and defects, Flourescent. Magnaflux Corporation. 399,999; Feb. 9; Serial No. 455,801; published Nov. 24, 1942.
Ointment. Prophylactic. W. S. Hughes. 168,845; renewed May 29, 1943.
Perfume, cologne, and toilet water. Prince Matchabelli Inc. 399,991; Feb. 9; Serial No. 455,630; published Nov. 17, 1942.
Perfumes. V. Vivaudou. 399,943; Feb. 9; Serial No. 450,189; published Nov. 17, 1942.
Pharmaceutical preparations. Chief Two Moon Herb Company. 168,844; renewed May 29, 1943.
Powder, Face. Lady Esther, Ltd. 399,971; Feb. 9; Serial No. 454,636; published Nov. 24, 1942.
Powders, Headache. R. Cox. 399,938; Feb. 9; Serial No. 447,631; published Mar. 17, 1942.
Preparation for the treatment of pellagra. W. M. Moseley. 399,988; Feb. 9; Serial No. 455,538; published Nov. 24, 1942.
Preparation for the treatment of foot ailments. M. Foster. 399,996; Feb. 9; Serial No. 455,726; published Nov. 24, 1942.
Starch for industrial purposes, Potato. Idaho Potato Starch Co. 400,030; Feb. 9.
Vitamin fortifier. Geo. P. Braun Company. 399,951; Feb. 9; Serial No. 451,708; published Apr. 28, 1942
Vitamin preparations. Valentine Laboratories, Inc 399,939; Feb. 9; Serial No. 448,348; published Jan 6, 1942.
Vitamin tonic. R. J. Beard. 399,960; Feb. 9; Serial No. 453,484; published Nov. 17, 1942.

CLASS 7

Cordage. M. J. Grady Company. 163,078; renewed Jan 2, 1943.
Twine and rope or cordage. M. J. Grady Company 168,224; renewed May 15, 1943.

CLASS 8

Cigarette paper. Champagne Paper Corporation 399,962; Feb. 9; Serial No. 453,747; published Nov. 3, 1942.
Cigarette paper. Champagne Paper Corporation. 399,987; Feb. 9; Serial No. 455,425; published Dec 1, 1942.

CLASS 9

Revolvers, automatic pistols, and other small arms. Webley & Scott Limited. 163,486; renewed Jan. 16 1943.

CLASS 11

Duplicating sheets, Coated. Old Town Ribbon & Carbon Co. Inc. 399,986; Feb. 9; Serial No. 455,379; published Nov. 24, 1942.

CLASS 12

Gypsum board. United States Gypsum Company. 400,003; Feb. 9; Serial No. 455,834; published Dec. 1, 1942.
Insulating material, Felt American Hair Felt Company. 169,332; renewed June 12, 1943.
Lime and acoustical plaster, Acoustical. Kelley Island Lime and Transport Company. 399,950; Feb. 9; Serial No. 451,680; published Dec. 1, 1942.
Liquid for use with concrete and cement mixtures. Anti-Hydro Waterproofing Company. 169,330; renewed June 12, 1943.
Roofing, roof valleys and gutters, and siding. Coated Products Corporation. 399,964; Feb. 9; Serial No 453,824; published Dec. 1, 1942.
Roofing sheets, and shingles, Waterproof. Barber Asphalt Paving Company. 163,017; renewed Jan. 2, 1943.

CLASS 13

Acetylene regulating valves. Liquid Carbonic Corporation. 400,001; Feb. 9; Serial No. 455,823; published Dec. 1, 1942.
Hardware. Stanley Works. 168,943; renewed May 29, 1943.
Hardware. Stanley Works. 168,947; renewed May 29, 1943.
Rings, Hog. Decker Manufacturing Company. 400,006; Feb. 9; Serial No. 455,910; published Dec. 1, 1942.

CLASS 14

Castings and ferrous metals and alloys, Iron alloy. Arcade Malleable Iron Co. 399,979; Feb. 9; Serial No. 454,995; published Nov. 24, 1942.
Steel, Tool. Carpenter Steel Company. 399,981; Feb. 9; Serial No. 455,096; published Nov. 24, 1942.

CLASS 15

Oils and greases, Lubricating. F. B. Hower. 163,090; renewed Jan. 2, 1943.
Oils for heating purposes. Union Petroleum Company. 167,767; renewed May 8, 1943.

CLASS 16

Paint. Cook Paint & Varnish Company. 399,992; Feb 9; Serial No. 455,646; published Dec. 1, 1942.
Paints, mineral spirits, and paint oil. Barber Asphalt Paving Company. 168,635; renewed May 29, 1943.
Pigments, Luminous, fluorescent, phosphorescent and radium-active. Rhode Island Laboratories, Inc 399,944; Feb. 9; Serial No. 450,459; published Sept. 1, 1942.
Varnish and paint enamels. Toch Brothers. 164,509; renewed Feb. 20, 1943.
Varnish-binder and a rapid-drying varnish, Rapid-drying. John A. Steen Varnish Company. 167,187; renewed Apr. 24, 1943.
Varnishes, stains, driers, etc. Chicago Varnish Company. 22,394; re-renewed Jan. 31, 1943.

CLASS 19

Automobiles, motor trucks, and motor cycles. Lanchester Motor Co. Ltd. 163,360; renewed Jan. 9, 1943.
Trucks and structural parts thereof, Elevating industrial. Baker R & L Company. 169,206; renewed June 12, 1943.

CLASS 21

Batteries, Storage. Merrimac Battery Plate Co. Inc. 162,312; renewed Dec 12, 1942.
Compound for application to ignition wires to protect them and make them waterproof, Liquid. Radiator Specialty Company. 399,977; Feb. 9. Serial No. 454,951; published Dec. 1, 1942.
Electric contacting elements. P. R. Mallory & Co. 399,945; Feb. 9. Serial No. 450,510; published Dec. 1, 1942.
Electric generating plants. Kohler Co. 167,671; renewed May 8, 1943.
Electrical porcelain insulators. Pacific Clay Products. 399,983; Feb. 9; Serial No. 455,124; published Dec. 1, 1942.
Generators of electric signals in radio, audio and carrier frequencies, and transmission equipment for telephone circuits. Clough Brengle Co. 399,963; Feb. 9; Serial No. 453,788; published Dec. 1, 1942.
Irons, Electric hand. Edmilton Corporation. 400,000; Feb. 9; Serial No. 455,818; published Dec. 1, 1942.
Radio receiving apparatus, combination radio receiving and electric phonograph apparatus with and without record changing mechanism, etc., and parts of each. Galvin Manufacturing Corporation. 399,935; Feb. 9; Serial No. 447,018; published Dec. 1, 1942.

CLASS 23

Mining machines, hoisting mechanism, grinders, etc. Sullivan Machinery Company. 164,992; renewed Feb. 27, 1943.
Tools. Stanley Works. 168,149; renewed May 15, 1943.
Tools. Stanley Works. 168,225; renewed May 15, 1943.

CLASS 24

Ironing tables. J. R. Clark Co. 399,928; Feb. 9; Serial No. 439,512; published Sept. 23, 1941.

CLASS 26

Apparatus for testing, exercising, and training the eyes. Bausch & Lomb Optical Company. 399,961; Feb. 9; Serial No. 453,591; published July 28, 1942.
Electric testing equipment—electro-chemical equipment. Clough Brengle Co. 399,940; Feb. 9; Serial No. 448,692; published Dec. 1, 1942.
Film, Photographic. J. N. Dribben. 399,982; Feb. 9; Serial No. 455,116; published Dec. 1, 1942.
Glassware, Graduated chemical and laboratory. Kimble Glass Company. 164,311; renewed Feb. 20, 1943.
Optical goods, and particularly spectacles, eyeglasses, and other ophthalmic mountings and parts thereof. American Optical Company. 162,668; renewed Dec. 26, 1942.
Rules, levels, squares, etc. Stanley Works. 169,067; renewed June 5, 1943.
Rules, levels, squares, etc. Stanley Works. 169,080; renewed June 5, 1943.
Sunglasses and optical frames. Marine Optical Mfg. Co. 399,972; Feb. 9; Serial No. 454,639; published Dec. 1, 1942.
Tape measures. Lufkin Rule Company. 400,035; Feb. 9.
Thermometers for use in connections with controllers for regulating temperatures for fluids of all types. W. J. Halpern. 399,965; Feb. 9; Serial No. 453,940; published Dec. 1, 1942.

CLASS 27

Watches, clocks, and parts thereof. Meyer & Stüdeli, Société Anonyme. 158,262; renewed Aug. 29, 1942.

CLASS 28

Jewelry, Sterling silver. H. S. Bick. 399,966; Feb. 9; Serial No. 454,001; published Dec. 1, 1942.

CLASS 29

Brushes including those with quill handles, Paint. Delta Brush Mfg. Corp. 399,954; Feb. 9; Serial No. 452,466; published Dec. 1, 1942.

CLASS 32

Mattresses. National Mattress Company. 400,007; Feb. 9; Serial No. 456,025; published Dec. 1, 1942.

CLASS 33

Glassware, Pressed. Westmoreland Specialty Company. 165,555; renewed Mar. 13, 1943.

CLASS 34

Coolers or heat exchangers, Liquid. Niagara Blower Company. 400,014; Feb. 9.
Gas welding, cutting, brazing, etc. Liquid Carbonic Corporation. 400,002; Feb. 9; Serial No. 455,824; published Dec. 1, 1942.
Heat-generating plants comprising oil tanks, motors, fans, etc. Winslow Boiler & Engineering Co. 169,146; renewed June 12, 1943.
Heating apparatus. Hauck Manufacturing Company. 169,208; renewed June 12, 1943.
Heating apparatus. Majestic Manufacturing Company. 165,083; renewed Mar. 6, 1943.

CLASS 35

Hose, Fabric. Charles Beck, Inc. 167,444; renewed May 1, 1943.

CLASS 37

Materials, Artists'. Art Crayon Co. 399,959; Feb. 9; Serial No. 453,355; published Dec. 1, 1942.
Paper for wrapping purposes, Kraft. Dudley Paper Company; 168,856; renewed May 29, 1943.
Paper, mailing envelopes, flat paper, etc., Writing. Z. and W. M. Crane. 163,466; renewed Jan. 16, 1943.
Paper, Wrapping. Brown Company. 166,931–2; renewed Apr. 17, 1943.
Paper, Writing. Brightwater Paper Company. 399,957; Feb. 9; Serial No. 453,137; published Dec. 1, 1942.
Tablets and book covers. Smith Tablet Company. 169,366; renewed June 12, 1943.

CLASS 38

Newspaper articles. Tribune Company. 167,615; renewed May 1, 1943.

CLASS 39

Apparel for miners, industrial workers, firefighters, etc., Protective wearing. Mine Safety Appliances Company. 399,929; Feb. 9; Serial No. 441,831; published Nov. 24, 1942.
Apparel, Infants' and children's wearing. A. S. Lazarus & Co. 399,949; Feb. 9; Serial No. 451,627; published Dec. 1, 1942.
Blouse and slip, and ensemble dresses, Combined. Leea M. Perlitch. 400,019; Feb. 9.
Blouse and slip, and ensemble dresses, Combined. Leea M. Perlitch. 400,022; Feb. 9.
Boots and shoes. International Shoe Co. 399,998; Feb. 9; Serial No. 455,757; published Dec. 1, 1942.
Clothing. Salt's Textile Manufacturing Company. 169,293; renewed June 12, 1943.
Clothing, Men's. Cincinnati Tailoring Co. 400,031; Feb. 9.
Coats, fur jackets, and fur muffs, Fur. Manny Pruskauer, Inc. 399,968; Feb. 9; Serial No. 454,201; published Dec. 1, 1942.
Coats, suits, coat and suit ensembles, etc., Women's and misses'. Bobshire Coats, Inc. 400,034; Feb. 9.
Dresses and dress ensembles, Ladies' and misses'. David Crystal, Inc. 400,027; Feb. 9.
Dresses, blouses, skirts, etc., Ladies' and misses', knitted. Joseph Guttman & Bros. 400,033; Feb. 9.
Dresses, Misses' and juniors'. Ely & Walker Dry Goods Company. 400,028; Feb. 9.
Dresses, skirts, blouses, etc., Ladies' and juniors'. K. Ferer. 400,020–1; Feb. 9.

Gloves. Fownes Brothers & Co. 23,017; re-renewed May 16, 1943.
Gloves, Ladies' fabric. Julius Kayser & Co. 400,024; Feb. 9.
Gloves made of leather with a suede finish, Misses' and women's. Saks & Company. 400,026; Feb. 9.
Hats for women and misses. Bertlyn Corporation. 399,975; Feb. 9; Serial No. 454,846; published Nov. 24, 1942.
Hats, hat bodies, hat linings, etc. Straws, Inc. 399,972; Feb. 9; Serial No. 454,744; published Dec. 1, 1942.
Hats, Ladies'. W. M. Hayflich. 399,955; Feb. 9; Serial No. 452,775; published Dec. 1, 1942.
Hats, Men's. George S. Bailey Hat Company. 399,997; Feb. 9; Serial No. 455,743; published Nov. 24, 1942.
Hats, Men's. Boyd-Richardson Company. 399,969; Feb. 9; Serial No. 454,500; published Nov. 24, 1942.
Hats, Men's. Men's Hats, Inc. 399,994; Feb. 9; Serial No. 455,660; published Nov. 24, 1942.
Hats, Women's. Laycob Hat Company. 399,952; Feb. 9; Serial No. 451,770; published Nov. 24, 1942.
Knitted and textile products, Men's and boys'. Strom, Collum & Hoppe. 400,012; Feb. 9.
Muffs, Ear. August Bentkamp. 400,017; Feb. 9.
Overalls and coveralls, Men's and boys'. Lindeke, Warner & Sons, Incorporated. 168,330; renewed May 22, 1943.
Overalls, work shirts, and rompers. Stuart, Keith & Co. Inc. 163,973; renewed Feb. 6, 1943.
Shirts, Men's and boys'. H. Berger. 166,862; renewed Apr. 17, 1943.
Shoes and slippers. Salvador Cuetara. 399,985; Feb. 9; Serial No. 455,253; published Nov. 24, 1942.
Suits and coats, Men's. Friedman-Marks Clothing Company, Inc. 400,015; Feb. 9.
Suits, Children's overall play. Maryland Company. 168,084; renewed May 15, 1943.
Suits, coats, overcoats, etc., Men's and boys'. Hart, Schaffner & Marx. 400,023; Feb. 9.

CLASS 40

Buckles and garment clasp supporter hooks, Plastic. Synthetic Plastics Corp. 400,032; Feb. 9.
Dress shields. A. Stein & Company. 168,904; renewed May 29, 1943.
Needle and strand for use in setting hair. Coiffure. Sew-and So Company. 399,956; Feb. 9; Serial No. 452,789; published Dec. 1, 1942.

CLASS 42

Cotton piece goods. American Bleached Goods Company. 399,942; Feb. 9; Serial No. 450,152; published Dec. 1, 1942.
Fabrics, Knitted, netted, and textile. James McCutcheon & Company. 166,915; renewed Apr. 17, 1943.
Piece goods. Bianchini Ferier, Inc. 399,989; Feb. 9; Serial No. 455,583; published Nov. 24, 1942.
Piece goods. Bianchini Ferier, Inc. 399,990; Feb. 9; Serial No. 455,585; published Nov. 24, 1942.
Piece goods. Bradford Dyers' Association, Limited. 168,791; renewed May 29, 1943.
Piece goods. Hess, Goldsmith & Co. Inc. 399,958; Feb. 9; Serial No. 453,331; published Nov. 24, 1942.
Piece goods of cotton. Liberty & Co. Limited. 169,602; renewed June 26, 1943.
Rayon piece goods. Stockton Textile Corporation. 399,984; Feb. 9; Serial No. 455,247; published Dec. 1, 1942.

CLASS 43

Silk, Thrown. Baer Company. 166,924; renewed Apr. 17, 1943.
Threads and yarns. M. J. Grady Company. 167,770; renewed May 8, 1943.

CLASS 44

Diagnostic instruments, Eye, ear, nose, and throat. H. L. De Zeng. 162,719; renewed Dec. 26, 1942.
Diathermy machines for therapeutic uses. M. Fink. 400,029; Feb. 9.
Respirators and inhalers. Willson Gogles, Inc. 164,347; renewed Feb. 20, 1943.

CLASS 45

Beverage, Non-alcoholic maltless. R. J. Reynolds. 399,930; Feb. 9; Serial No. 442,638; published July 22, 1941.
Beverages. Seven-Up Company. 399,995; Feb. 9; Serial No. 455,712; published Nov. 24, 1942.
Canned citrus juices. Border Packing Corporation. 399,967; Feb. 9; Serial No. 454,184; published Nov. 24, 1942.
Concentrate for beverage purposes, Nonalcoholic, maltless, fruit-flavored. Premier Malt Products Co. of Ohio, Inc. 167,048; renewed Apr. 24, 1943.

CLASS 46

Canned fish. Sea Pride Packing Corporation, Ltd. 400,011; Feb. 9; Serial No. 456,276; published Dec. 1, 1942.
Canned meats, canned vegetables, and canned combinations of meats and vegetables. John Cook & Sons, Inc. 162,708; renewed Dec. 26, 1942.
Canned vegetables, canned fruits, and canned fruit juices. National Retailer-Owned Grocers, Inc. 400,010; Feb. 9; Serial No. 456,194; published Dec. 1, 1942.
Cereals, Prepared and semi-prepared breakfast. Aunt Jemima Mills Company. 167,387; renewed May 1, 1943.
Cocktail spread, pineapple cocktail spread, pimento cocktail spread, etc., and ice cream, Relish. Borden Company. 399,946; Feb. 9; Serial No. 450,707; published Dec. 1, 1942.
Extract for food purposes, Malt. A. F. Stoy. 166,103; renewed Mar. 27, 1943.
Extract in syrup form, Malt. Decatur Brewing Company. 169,597; renewed June 26, 1943.
Extracts and juices, Fruit and vegetable. Bruce's Juices, Inc. 399,948; Feb. 9; Serial No. 451,588; published June 2, 1942.
Feed, cow feed, cattle feed, etc., Horse and mule. Sturgess Company. 167,889; renewed May 8, 1943.
Feeds for live poultry. Allied Mills, Inc. 399,947; Feb. 9; Serial No. 450,913; published Nov. 17, 1942.
Flour, Wheat. Aunt Jemima Mills Company. 167,394; renewed May 1, 1943.
Food product, Non-cereal. Galen Company. 399,953; Feb. 9; Serial No. 452,071; published Dec. 1, 1942.
Fruits, Fresh. Holmes Brothers. 400,009; Feb. 9; Serial No. 456,183; published Dec. 1, 1942.
Grapes, Fresh. Associated Growers, Incorporated. 169,263; renewed June 12, 1943.
Honey. H. H. Schumacher. 399,937; Feb. 9; Serial No. 447,577; published Apr. 21, 1942.
Soup, French Canadian style pea. T. Nicolet. 400,016; Feb. 9.
Vegetable salad and cooking oils. George Sirota & Company. 399,934. Feb. 9; Serial No. 446,670; published Nov. 24, 1942.
Vegetables, Fresh. Souza Bros. Packing Co. 400,018; Feb. 9.

CLASS 50

Automobile service and maintenance equipment. D. M. Dohnson. 399,976; Feb. 9; Serial No. 454,851; published Dec. 1, 1942.
Fabric, Woven textile. Columbus Coated Fabrics Corporation. 399,932; Feb. 9; Serial No. 445,486; published Dec. 1, 1942.
Felt. American Hair Felt Co. 169,084; renewed June 5, 1943.
Film, Cellulose acetate, coated (matte finish). Edwin N. Scully. 400,013; Feb. 9.
Plates, Planographic printing. Addressograph-Multigraph Corporation. 399,970; Feb. 9; Serial No. 454,566; published Dec. 1, 1942.

LIST OF REISSUE PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 9TH DAY OF FEBRUARY, 1943

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice).

Borg-Warner Corporation. (See White, Samuel O., assignor.)

Crawford, Loyal F., assignor to Goodman Manufacturing Company, Chicago, Ill. Shaker conveyer. Re. 22,263; Feb. 9.

Goodman Manufacturing Company. (See Crawford, Loyal F., assignor.)

Loewe, Walter S., New Rochelle, assignor to W. Neumann, Scarsdale, N. Y. Secondary and tertiary 3-amino-methyl-polyhydroxy-phthalides. Re. 22,264; Feb. 9.

Neumann, Walter. (See Loewe, Walter S., assignor.)

White, Samuel O., Muncie, Ind., assignor to Borg-Warner Corporation, Chicago, Ill. Transmission synchronizer. Re. 22,265; Feb. 9.

LIST OF DESIGN PATENTEES

Bartram, Harry E., Sumner, Ill. Atomizer. 134,988; Feb. 9.

Baumgardner, Cersal F., Celina, Ohio. Portable paving machine. 135,005; Feb. 9.

Benner Box & Printing Company. (See Benner, Thomas W., assignor.)

Benner, Thomas W., assignor to Benner Box & Printing Company, Miami, Fla. Garment hanger. 134,980; Feb. 9.

Berger, Milton, New York, N. Y. Dress. 135,013; Feb. 9.

Bernstein, Joseph, New York, N. Y. Embroidered fabric. 134,989; Feb. 9.

Breckwoldt, Julius, & Son, Inc. (See Schultz, William D., assignor.)

Brennan, Raymond F., Attleboro, Mass. Cross support and display unit. 134,993; Feb. 9.

Brown, Morton, New York, N. Y. Slip. 135,006; Feb. 9.

Caron, Alexander, New York, N. Y. Dress. 135,014; Feb. 9.

Carson, Netye D., New York, N. Y. Dress. 135,015; Feb. 9.

Carson, Netye D., New York, N. Y. Dress. 135,016; Feb. 9.

Center, Charles I., and W. E. Tarr, South Bend, Ind. Desk. 135,007; Feb. 9.

Cohn & Rosenberger, Inc. (See Katz, Adolph, assignor.)

Coil, Clio, Oklahoma City, Okla. Purveying stand. 135,017; Feb. 9.

Consolidated Razor Blade Co. (See Worley, Ernest W., assignor.)

Everett, Charles E., assignor to The Massey-Harris Company, Racine, Wis. Combine. 135,008; Feb. 9.

Favari, Sam, Weirton, W. Va. Pin or similar article. 134,975; Feb. 9.

Fetter, Norman C., assignor to Micro Switch Corporation, Freeport, Ill. Electric switch housing. 134,994; Feb. 9.

Fishberger, Isidor, New York, assignor of one-half to E. Pappert, Flushing, N. Y. Spectacle frame or similar article. 134,976; Feb. 9.

Galter, Jack, Chicago, Ill. Cover for Bibles. 134,998; Feb. 9.

Gearing, Charles A., Bellwood, Ill. Flag stand. 134,995; Feb. 9.

Gershuny, Abe, New York, N. Y. Dress. 135,018; Feb. 9.

Gerson, Samuel L., Bridgeton, N. J. Barometer. 134,990; Feb. 9.

Gerson, Samuel L., Bridgeton, N. J. Barometer. 134,991; Feb. 9.

Giovagnoni, Violet, New York, N .Y. Negligee. 135,021; Feb. 9.

Gottlieb, David E., New York, N. Y. Dress. 135,019; Feb. 9.

Gottlieb, David E., New York, N. Y. Dress. 135,020; Feb. 9.

Harpignies, Zinaida, Kew Gardens, N. Y. Hat. 135,009; Feb. 9.

Harpignies, Zinaida, Kew Gardens, N. Y. Hat. 135,010; Feb. 9.

Harpignies, Zinaida, Kew Gardens, N. Y. Hat. 135,011; Feb. 9.

Herzfeld, Emil, Stamford, Conn. Scarf or similar article. 134,999; Feb. 9.

Hobden, Frederick G., assignor to Quaker Lace Company, Philadelphia, Pa. Lace tablecloth. 135,012; Feb. 9.

Jeannette Glass Company, The. (See Sloan, Carl T., assignor.)

Kaminky, Oscar H., assignor to Micro Switch Corporation, Freeport, Ill. Electric switch housing. 134,996; Feb. 9.

Katz, Adolph, Providence, R. I., assignor to Cohn & Rosenberger, Inc., New York, N. Y. Separable brooch. 134,981; Feb. 9.

Katz, Adolph, Providence, R. I., assignor to Cohn & Rosenberger, Inc., New York, N. Y. Brooch or similar article. 134,982; Feb. 9.

Katz, Adolph, Providence, R. I., assignor to Cohn & Rosenberger, Inc., New York, N. Y. Brooch or similar article. 134,983; Feb. 9.

Katz, Adolph, Providence, R. I., assignor to Cohn & Rosenberger, Inc., New York, N. Y. Brooch or similar article. 134,984; Feb. 9.

Madan, Edward K., Maplewood, N. J. Medallion. 134,985; Feb. 9.

Massey-Harris Company, The. (See Everett, Charles E., assignor.)

McKinney, Harris D., Bucks County, assignor to Proctor & Schwartz, Inc., Philadelphia, Pa. Combined flatiron and lamp housing. 135,022; Feb. 9.

Meyer, Maximilian C., Brooklyn, N. Y. Jewelry pin. 134,977; Feb. 9.

Micro Switch Corporation. (See Fetter, Norman C., assignor.)

Micro Switch Corporation. (See Kaminky, Oscar H., assignor.)

Norris, Lannie F., Minneapolis, Minn. Milk dispenser. 135,000; Feb. 9.

Pappert, Emanuel. (See Fishberger, Isidor, assignor.)

Park, Malcolm S., Mount Kisco, N. Y., assignor to The Singer Manufacturing Company, Elizabeth, N. J. Vacuum cleaner casing. 135,001; Feb. 9.

Peters, Marvin G., Pittsburgh, Pa., assignor to Pittsburgh Outdoor Advertising Company. Billboard. 134,992; Feb. 9.

Pittsburgh Outdoor Advertising Company. (See Peters, Marvin G., assignor.)

Proctor & Schwartz, Inc. (See McKinney, Harris D., assignor.)

Quaker Lace Company. (See Hobden, Frederick G., assignor.)

Raphaels, Edwin, New York, N. Y. Textile fabric. 135,002; Feb. 9.

Sandel Manufacturing Co. (See Waltman, Chauncey E., assignor.)

Schultz, William D., assignor to Julius Breckwoldt & Son, Inc., Dolgeville, N. Y. Toilet seat hinge. 134,986; Feb. 9.

Seligman, Dorothy, New York, N. Y. Dress. 135,023; Feb. 9.

Singer Manufacturing Company, The. (See Park, Malcolm S., assignor.)

Sloan, Carl T., assignor to The Jeannette Glass Company, Jeannette, Pa. Ash tray. 134,997; Feb. 9.

Sullivan, Ruby, Cincinnati, Ohio. Combination dessert and cake dish. 135,003; Feb. 9.

Tarr, Wilson E. (See Center, C I., and Tarr.)

Waltman, Chauncey E., assignor to Sandel Manufacturing Co., Chicago, Ill. Table. 134,978; Feb. 9.

Wiener, Philip, New York, N. Y. Embroidered lace. 135,004; Feb. 9.

Worley, Ernest W., Kansas City, Kans., assignor to Consolidated Razor Blade Co., Inc., Jersey City, N. J. Combined glider and cradle. 134,979; Feb. 9.

Zlatohlavek, Rudolph, Manitowoc, Wis. Badge or similar article. 134,987; Feb. 9.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 9TH DAY OF FEBRUARY, 1943

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice).

Abramson, Harry L., Idaho Falls, Idaho. Turkey saddle. 2,310,825; Feb. 9.
Acme Broom Company. (See Bohnenblust, Alvin A.)
Adams, William P., Cleveland Heights, Ohio. Hob. 2,310,826; Feb. 9.
Adel Precision Products Corp. (See Ellinwood, Herman R., assignor.)
Adlington, George S., Putney Hill, London, assignor to Rayoid Manufacturing Company Limited, London, England. Treating a product produced from cellulose derivative material. 2,310,272; Feb. 9.
Aircraft-Marine Products, Inc. (See Buchanan, Stephen N., assignor.)
Ajax Manufacturing Company, The. (See Gaines, F. W., and Ehlert, assignors.)
Ajax Manufacturing Company, The. (See Gaines F. W., 3rd, and Ehlert, assignors.)
Akron Standard Mold Company. (See Bostwick, Henry C., assignor.)
Aktiengesellschaft Brown, Boveri & Cie. (See Waldvogel, Paul, assignor.)
Albi' Chemical Corporation. (See Ritter, Ludwig, assignor.)
Alex, Anastasius G. (See Sargent, E. H., and Alex.)
Alford, Andrew, New York, N. Y., assignor to Federal Telephone & Radio Corporation. Electronic beacon modulator. 2,310,202; Feb. 9.
Alien Property Custodian. (See Back, Oskar.)
Alien Property Custodian. (See Bähring, H., and Mulert.)
Alien Property Custodian. (See Becker, Rudolf.)
Alien Property Custodian. (See Bielitz, Friedrich.)
Alien Property Custodian. (See Bremer, H., and Krones.)
Alien Property Custodian. (See Brenner, Paul.)
Alien Property Custodian. (See Butter, Karl.)
Alien Property Custodian. (See Daumiller, G., and Hoffmann.)
Alien Property Custodian. (See Dornauf, Josef.)
Alien Property Custodian. (See Dornier, Claude.)
Alien Property Custodian. (See Durr, Lüdwig.)
Alien Property Custodian. (See Esnault-Pelterie, Robert.)
Alien Property Custodian. (See Franz, Anselm.)
Alien Property Custodian. (See Fuscaldo, Ottavio.)
Alien Property Custodian. (See Gavagnin, Tullio.)
Alien Property Custodian. (See Giavotto, Pietro.)
Alien Property Custodian. (See Gilli, Paul.)
Alien Property Custodian. (See Guinot, Henri M.)
Alien Property Custodian. (See Heimann, Walter.)
Alien Property Custodian. (See Hembold, Johann-Georg.)
Alien Property Custodian. (See Herbert, Wilhelm.)
Alien Property Custodian. (See Herrmann, Conrad.)
Alien Property Custodian. (See Hümmelchen, Wilhelm.)
Alien Property Custodian. (See Koppelmann, F., Frass, and Penk.)
Alien Property Custodian. (See Maul, Michael.)
Alien Property Custodian. (See Menzel, Friedrich.)
Alien Property Custodian. (See Mercier, Jean.)
Alien Property Custodian. (See Müller, Johannes.)
Alien Property Custodian. (See Müller, R., and Lee.)
Alien Property Custodian. (See Nessler, Friedrich.)
Alien Property Custodian. (See Neuerburg, Walter.)
Alien Property Custodian. (See Perrin, René.)
Alien Property Custodian. (See Petrovich, Louis.)
Alien Property Custodian. (See Reppe, W., Steinhofer, and Daumiller.)
Alien Property Custodian. (See Retterath, Valentin.)
Alien Property Custodian. (See Schantl, E., and Messner.)
Alien Property Custodian. (See Schick, Friedrich.)
Alien Property Custodian. (See Thöm, Kurt.)
Alien Property Custodian. (See Wikarski, Stefan.)
Allen, Howard G., Niagara Falls, assignor to Consolidated Packaging Machinery Corporation, Buffalo, N. Y. Sealing containers. 2,310,382; Feb. 9.
Allied Chemical & Dye Corporation. (See Zavertnik, Joseph, assignor.)
Allin, George S., assignor to Isaacson Iron Works, Seattle, Wash. Tractor. 2,310,727; Feb. 9.
Allison, Oliver J., assignor of one-half to O'N. A. Diaz, New Orleans, La. Automobile tire force pump. 2,310,565; Feb. 9.
American Bowling and Billiard Corporation. (See Bancroft, James E., assignor.)
American Can Co. (See Ziehmer, George P., Jr., assignor.)
American Foundry Equipment Company, The. (See Guite, Roy W., assignor.)
American Machine & Foundry Company. (See Randolph, Clifford F., assignor.)
American Rolling Mill Company, The. (See Marshall, William E., assignor.)
American Seating Company. (See Todd, Edwin T., assignor.)
American Steel Foundries. (See Tack, C. E., and Helsten, assignors.)
American Steel and Wire Company, The. (See McGlincy, Lloyd F., assignor.)
Andersen, Alfred E., Brooklyn, assignor to Armored Tank Corporation, New York, N. Y. Hook-on-and-release mechanism for fighting tanks. 2,310,887; Feb. 9.
Anderson, Charles E., Narberth, assignor of one-half to W. H. Jefferies, Moylan, Pa. Bag clamp. 2,310,827; Feb. 9.
Anderson, Earl I., Bayside, Long Island, and A. Barco, Jackson Heights, N. Y., assignors to Radio Corporation of America. Television transmitting system. 2,310,337; Feb. 9.
Anderson, Roger, Seattle, Wash. Clavicle splint. 2,310,566; Feb. 9.
Andrews, John S., St. Paul, L. H. Evans, and L. J. Huber, Minneapolis, Minn., assignors to General Mills, Inc. Mineral fortification of foodstuffs and medicinal products. 2,310,383; Feb. 9.
Anti-Abrandants (Proprietary) Limited. (See Haarhoff, Daniel van der M., assignor.)
Armored Tank Corporation. (See Anderson, Alfred E., assignor.)
Arms, Merton H., assignor to Bryant Chucking Grinder Company, Springfield, Vt. Metalworking machine. 2,310,338; Feb. 9.
Armstrong Cork Company. (See Callis, Conral C., assignor.)
Armstrong Cork Company. (See Summersgill, James F., assignor.)
Armstrong Products Corporation. (See Dudley, Roy A., assignor.)
Arndt, William F., Los Angeles, Calif., assignor to Warner Brothers Pictures, Inc. Drive system for process photography. 2,310,339; Feb. 9.
Arndt, William F., Los Angeles, Calif., assignor to Radio Corporation of America. Film marking system. 2,310,340; Feb. 9.
Arness, William B., Bellevue, Pa., assignor to Rustless Iron and Steel Corporation. Rustless iron. 2,310,341; Feb. 9.
Arnoldy, Roman F., Houston, Tex., assignor to The Linde Air Products Company. Apparatus for treating metal articles. 2,310,384; Feb. 9.
Artzt, Maurice, Haddonfield, N. J., assignor to Radio Corporation of America. Balanced direct and alternating current amplifiers. 2,310,342; Feb. 9.
Atlas Underwear Company, The. (See Harwood, Asa J., assignor.)
Atlee, Zed J., Elmhurst, and H. Brackney, Evanston, assignors to General Electric X-Ray Corporation, Chicago, Ill. X-ray apparatus and construction. 2,310,567; Feb. 9.
Atlee, Zed J., Elmhurst, and H. Brackney, assignors to General Electric X-Ray Corporation, Chicago, Ill. Joining materials. 2,310,568; Feb. 9.
Atwood Vacuum Machine Company, The. (See Nelson, R. S., and Wintercorn, assignors.)
Aubert, Fred B., Grosse Pointe, Mich. Control device. 2,310,504; Feb. 9.
Automatic Devices Corporation. (See Lehmann, Herbert G., assignor.)
Autoyre Company, The. (See Sanford, Roy S., assignor.)
Babcock & Wilcox Company. (See Mayo, D. H. H., and Raynor, assignors.)
Back, Oskar, Brunn, Czechoslovakia; vested in the Alien Property Custodian. Chimney or ventilation cowl. 2,310,828; Feb. 9.
Badertscher, Darwin E., and G. S. Crandall, Woodbury, and F. M. Seger, Pitman, N. J., assignors to Socony-Vacuum Oil Company, Incorporated, New York, N. Y. Lubricant composition. 2,310,670; Feb. 9.
Bähring, Herbert, Klein-Machnow, and T. Mulert, Zehlendorf, Germany; vested in the Alien Property Custodian. Synchronized saw-tooth current generator. 2,310,888; Feb. 9.
Bales, James E., assignor to Lyon Metal Products, Incorporated, Aurora, Ill. Gas welding table. 2,310,904; Feb. 9.
Bancroft, James E., Jamaica, assignor to American Bowling and Billiard Corporation, New York, N. Y. Projector. 2,310,273; Feb. 9.
Banker, Oscar H., assignor to New Products Corporation, Chicago, Ill. Air filter system for motor and clutch units. 2,310,203; Feb. 9.

Barab, Jacob, assignor to Hercules Powder Company, Wilmington, Del. Blasting cartridge. 2,310,343; Feb. 9.
Barab, Jacob, assignor to Hercules Powder Company, Wilmington, Del. Blasting cartridge. 2,310,344; Feb. 9.
Barco, Allen. (See Anderson, E. I., and Barco.)
Barnett, Maxwell M., Port Sulphur, La., assignor to Freeport Sulphur Company, New York, N. Y. Production of sulphur dioxide-olefin resins. 2,310,605; Feb. 9.
Barr Rubber Products Company, The. (See Frissell, Robert R., assignor.)
Barth, Elmer J. (See Peterson, C. D., and Barth.)
Barth, Paul M., Manhattan Beach, Calif. Musical instrument. 2,310,606; Feb. 9.
Bartlett, Percy, Springfield, Pa., assignor to General Electric Company. Electric circuit breaker. 2,310,728; Feb. 9.
Bastiansen, Otto, Woodhaven, N. Y. Smoking pipe. 2,310,385; Feb. 9.
Batchelor, John C., Hastings on Hudson, N. Y. Image producer. 2,310,671; Feb. 9.
Betesole, Dwight E., Glenbrook, assignor to Norma-Hoffmann Bearing Corporation, Stamford, Conn. Rubber bonded split metal washer seal. 2,310,607; Feb. 9.
Beachy, Frank, Swissvale, Pa. Window closure. 2,310,672; Feb. 9.
Beauchamp, George D., Los Angeles, Calif. Stringed musical instrument. 2,310,199; Feb. 9.
Becker, Leonard, assignor to S. Bucksbaum and Company, Chicago, Ill. Vinyl resin composition and articles of manufacture comprising same. 2,310,889; Feb. 9.
Becker, Rudolf, Munich-Solln, Germany; vested in the Alien Property Custodian. Process of and apparatus for degasifying liquids and washing gases. 2,310,829; Feb. 9.
Beckett, Reginald W., Elyria, Ohio. Apparatus for burning liquid fuel. 2,310,274; Feb. 9.
Beckwith, Edwin L., Brookline, and C. P. MacIver, Newton, Mass., assignor to Beckwith Manufacturing Company, Dover, N. H. Scabbard. 2,310,204; Feb. 9.
Beckwith Manufacturing Company. (See Beckwith, E. L., and MacIver, assignors.)
Beebe, Edgar A., Los Angeles, Calif. Phonographic chip remover. 2,310,275; Feb. 9.
Bell, Alfred B., assignor to Heywood-Wakefield Company, Gardner, Mass. Collapsible chair. 2,310,345; Feb. 9.
Bell, Alfred B., assignor to Heywood-Wakefield Company, Gardner, Mass. Driver's chair. 2,310,346; Feb. 9.
Bell, Charles C., Marblehead, Mass., assignor to United Shoe Machinery Corporation, Borough of Flemington, N. J. Cement spraying unit. 2,310,205; Feb. 9.
Bell Telephone Laboratories, Incorporated. (See Dahlbom, C. A., and Hearn, assignors.)
Bell Telephone Laboratories, Incorporated. (See Gent, Edgar W., assignor.)
Bell Telephone Laboratories, Incorporated. (See Hall, J. A., and Schmied, assignors.)
Bell Telephone Laboratories, Incorporated. (See Higgins William H C., assignor.)
Bell Telephone Laboratories, Incorporated. (See Holden, William H. T., assignor.)
Bell Telephone Laboratories, Incorporated. (See Hoyt, Frederick A., assignor.)
Bell Telephone Laboratories, Incorporated. (See Meacham, L. A., and Parker, assignors.)
Bell Telephone Laboratories, Incorporated. (See Ressler, Ralph E., assignor.)
Bender, Byron W. (See Brooks, A. E., and Bender.)
Bendix Aviation Corporation. (See Briechle, A., Hurley, and Merritt, assignors.)
Bendix Aviation Corporation. (See Hurley, Roy T., assignor.)
Benjamin, Harry S., Poughkeepsie, N. Y. Free service coin-controlled machine. 2,310,206; Feb. 9.
Bennett, Alva H., Kenmore, and R. S. Estey, Buffalo, assignors to Spencer Lens Company, Buffalo, N. Y. Colorimeter. 2,310,608; Feb. 9.
Berck, William F., Haywood, assignor to R. N. Brodie Company, Oakland, Calif. Preset quantum and reset quantity counter. 2,310,347; Feb. 9.
Berkner, Arthur K., Passaic, assignor of one-fourth to W. J. Brown, Montclair, one-fourth to P. P. Nielsen, Belleville, and one-fourth to H. Griffinger, Newark, N. J. Slide fastener. 2,310,609; Feb. 9.
Bethlehem Steel Company. (See Wilke, W. P., III, and Erskine, assignors.)
Bidner, John. (See Schofield, W. W., Owen, and Bidner.)
Bielitz, Friedrich, Dessau-Ziebigk, Germany; vested in the Alien Property Custodian. Supercharger regulation. 2,310,831; Feb. 9.
Bilz, William F., Coulters, Pa. Surface gauge clamp. 2,310,276; Feb. 9.
Bissell, Ernest F., Hayden, Colo. Deflector for grain. 2,310,610; Feb. 9.
Blackburn, Lila I., and L. de Cordova, Los Angeles, Calif. Urinal bag. 2,310,505; Feb. 9.
Blair, Charles M., Jr., Webster Groves, Mo., assignor to Petrolite Corporation, Ltd., Wilmington, Del. Treating pipeline oil. 2,310,673; Feb. 9.
Blair, George W., and J. F. Schott, assignors to Mishawaka Rubber and Woolen Manufacturing Company, Mishawaka, Ind. Molding apparatus for open type cushions. 2,310,830; Feb. 9.
Blair, John I., and H. Imbt, assignors to Worthington Mower Company, Stroudsburg, Pa. Power transmitting mechanism. 2,310,386; Feb. 9.
Blair, John I., and H. Imbt, assignors to Worthington Mower Company, Stroudsburg, Pa. Mowing machine. 2,310,387; Feb. 9.
Blair, John I., assignor to Worthington Mower Company, Stroudsburg, Pa. Mowing machine. 2,310,388; Feb. 9.
Blakely, Robert T., Ridgewood, N. J., assignor to International Business Machines Corporation, New York, N. Y. Time recorder. 2,310,389; Feb. 9.
Blandford, Alfred R., Stafford, assignor to The English Electric Company Limited, London, England. Electrical switching apparatus. 2,310,905; Feb. 9.
Blears, John, assignor to Hope's Windows, Inc., Jamestown, N. Y. Fastening device for windows. 2,310,348; Feb. 9.
Bley, Rudolph S., Milligan College, Tenn., assignor to North American Rayon Corporation, New York, N. Y. Surface-active incrustation inhibitor. 2,310,207; Feb. 9.
Bley, Rudolph S., Milligan College, Tenn., assignor to North American Rayon Corporation, New York, N. Y. Surface-active incrustation inhibitor. 2,310,208; Feb. 9.
Bley, Rudolph S., Milligan College, Tenn., assignor to North American Rayon Corporation, New York, N. Y. Producing cellulose derivatives. 2,310,729; Feb. 9.
Bliss, Robert H., Syracuse, N. Y. Window construction. 2,310,506; Feb. 9.
Blondeau, Ernest E., Tulsa, Okla., assignor to Geophysical Research Corporation, New York, N. Y. Electrical exploration of geological strata. 2,310,611; Feb. 9.
Bobo, Stephen N., New York, N. Y. Food broiler rack. 2,310,349; Feb. 9.
Bocjl Corporation. (See Lang, Joseph C., assignor.)
Bodey, Charles E., Jr., assignor to Edward E. Johnson, Incorporated, St. Paul, Minn. Deep well screen. 2,310,507; Feb. 9.
Bohnenblust, Alvin A., Kansas City, Kans., assignor, by mesne assignments, to H. E. Lindstrom, Sedalia, Mo., doing business under the name of Acme Broom Company. Mop. 2,310,508; Feb. 9.
Booth, William E., Runcorn, England, assignor to Imperial Chemical Industries Limited. Degreasing of metal articles. 2,310,569; Feb. 9.
Bosco, George B., Chicago, Ill. Concrete form. 2,310,669; Feb. 9.
Boskovich, Frank. (See Ljubetich, Carmen and D., Boskovich, and Joncich.)
Bosland, Herman S. (See La Piana, F. G., and Bosland.)
Boston Woven Hose & Rubber Company. (See Marcy, Grosvenor D., assignor.)
Bostwick, Henry C., assignor to Akron Standard Mold Company, Akron, Ohio. Toggle press. 2,310,674; Feb. 9.
Bostwick, Myron A., Budd Lake, N. J., assignor to Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa. Network distribution system 2,310,832; Feb. 9.
Bousman, Samuel I., assignor to Western Machinery Company, San Francisco, Calif. Adjustable eccentric 2,310,209; Feb. 9.
Bovard, Charles M., assignor to Cooper-Bessemer Corporation, Mount Vernon, Ohio. Valve for fuel injection systems. 2,310,350; Feb. 9.
Bowan, Walter J., and E. H. Fawley, assignors to Mueller Co., Decatur, Ill. Stopper for pipes. 2,310,351, Feb. 9.
Bowden(Engineers) Limited. (See Melsom, Walter A., assignor.)
Boyce, George E., assignor to International Detachable Bits & Equipment Limited, South Porcupine, Ontario, Canada. Forging and refinishing detachable bits and the like and apparatus therefor. 2,310,675; Feb. 9.
Brackney, Howard. (See Atlee, Z. J., and Brackney.)
Brady, John W., Los Angeles, Calif. Toothbrush pack 2,310,571; Feb. 9.
Brailsford, Joseph D. (See Rust, N. M., Brailsford, and Goodenough.)
Brandes, Frank A., Shaker Heights, Ohio. Press. 2,310,890; Feb. 9.
Brandt, Robert J., Los Angeles, Calif. Lamp attachment. 2,310,509; Feb. 9.
Branick, Charles E., Fargo, N. Dak. Tire spreader. 2,310,891; Feb. 9.
Branick, Charles E., Fargo, N. Dak. Valve. 2,310,892; Feb. 9.
Brekke, Benjamin, Longview, Wash. Concrete block molding machine. 2,310,833; Feb. 9.
Bremer, Heinrich, and F. Krones, Berlin, Germany; vested in the Alien Property Custodian. Mount for long wave quartz crystals. 2,310,612; Feb. 9.
Brenner, Paul, Hanover, Germany; vested in the Alien Property Custodian. Method and device for casting plated ingots. 2,310,893; Feb. 9.
Bridges, Gerald G., and S. A. Miller, Jr., Greensburg, Ind. Holder for bottles, etc. 2,310,390; Feb. 9.

Briechle, Ambrosius, Brooklyn, R. T. Hurley, Dobbs Ferry, New York, N. Y., and G. E. Merritt, Lusby, Md., assignors to Bendix Aviation Corporation, South Bend, Ind. Simulating bombing. 2,310,613; Feb. 9.
Briggs, Merton B., assignor to I. A. Simon, Pittsburgh, Pa. Stabilizer. 2,310,570; Feb. 9.
Brodie, Ralph N., Company. (See Berck, William F., assignor.)
Brooks, Arthur E., Nutley, and B. W. Bender, Wanaque, N. J., assignors to United States Rubber Company, New York, N. Y. Absorptive mold lining. 2,310,391; Feb. 9.
Brostrom, Charles G., Salem, Mass., assignor to United Shoe Machinery Corporation Flemington, N. J. Roughing tool. 2,310,211; Feb. 9.
Brounn, Morrison J. (See Fritzam, H. E., and Brounn.)
Brown, Benjamin G., Flint, assignor to General Motors Corporation, Detroit, Mich. Air cleaner and silencer assembly. 2,310,510; Feb. 9.
Brown Corp., The. (See Brown, Henry W., assignor.)
Brown, Henry W., assignor to The Brown Corp., Syracuse, N. Y. Apparatus for distributing insecticides and germicides. 2,310,895; Feb. 9.
Brown, William J., et al. (See Berkner, Arthur K., assignor.)
Bruce, Lawrence Richard, Inc. (See Friedman, G., and Goldfarb, assignors.)
Brusset, Jean A., Blairmore, Alberta, Canada. Dry flotation, and media and apparatus therefor. 2,310,894; Feb. 9.
Bryant Chucking Grinder Company. (See Arms, Merton H., assignor.)
Brynjolfsson, Bergur L., Chicago, Ill. Can opener 2,310,210; Feb. 9.
Buch, Rudolf, and F. Haemmerling, Berlin-Charlottenburg, Germany, assignors to General Electric Company. Directionally responsive alternating current tachometer. 2,310,511; Feb. 9.
Buchanan, James A., United States Navy. Angular classifying accelerometer. 2,310,213; Feb. 9.
Buchanan, Stephen N., Washington, D. C., assignor to Aircraft-Marine Products, Inc., Elizabeth, N. J. Electrical connector. 2,310,212; Feb. 9.
Bucksbaum, S., and Company. (See Becker, Leonard, assignor.)
Buller, John F., Dallas, Oreg. Lathing machine. 2,310,512; Feb. 9.
Bullock, Giles E., Rochester, N. Y. Making pressure tanks. 2,310,834; Feb. 9.
Bullowa, Jesse G. M., New York, and H. D. Ratish, Brooklyn, N. Y. Oxygen enrichment. 2,310,277; Feb. 9.
Bulova Watch Company. (See Lux, Eugene, assignor.)
Burke & James, Inc. (See Grover, Garrison P., assignor.)
Burleigh, James K., Yonkers, and J. A. Weis, New York, N. Y. Portable mail holder. 2,310,835; Feb. 9.
Burns, Erwin, Los Angeles, Calif. By-pass type liner hanger. 2,310,572; Feb. 9.
Burns, Henry N., Rossburg, Ohio. Power and transmission unit. 2,310,513; Feb. 9.
Burton, Edward F., Los Angeles, assignor to Douglas Aircraft Company, Inc., Santa Monica, Calif. Aircraft cabin. 2,310,573; Feb. 9.
Bush, Paul L., and D. E. Lovell, assignors to Mishawaka Rubber and Woolen Manufacturing Company, Mishawaka, Ind. Rubber coating. 2,310,676; Feb. 9.
Butler, Clifford E. (See Stout, Charles R., assignor.)
Butler, William L., Schenectady, and G. M. Hausler, Ballston Lake, N. Y., assignors to General Electric Company. Circuit controller. 2,310,730; Feb. 9.
Butter, Karl, Rostock, Germany; vested in the Alien Property Custodian. Riveting machine. 2,310,836; Feb. 9.
Byron Jackson Co. (See Lundeen, Chester A., assignor.)
Caldwell, Harry F. (See Tuthill, H. B., and Caldwell.)
Callender, Frank S., Detroit, Mich. Thermostatic storage battery control. 2,310,514; Feb. 9.
Callis, Conral C., Smoketown, assignor to Armstrong Cork Company, Lancaster, Pa. Manger. 2,310,200; Feb. 9.
Campbell, Rodney B., assignor to J. Eley, Jr., Los Angeles, Calif. Regulating valve. 2,310,667; Feb. 9.
Campbell, Vincent D., Rocky Hill, and C. H. Wise., assignors to Hartford-Empire Company, Hartford, Conn. Reversing means for regenerative furnaces. 2,310,392; Feb. 9.
Canac, Louis H. F., and E. A. M. A. Segol, Toulon, Var, assignors to Société "Alliages Autoproteges," Paris, (Seine), France. Alloy. 2,310,214; Feb. 9.
Carbide and Carbon Chemicals Corporation. (See Carruthers, Thomas F., assignor.)
Carbide and Carbon Chemicals Corporation. (See Cox, H. L., and Plewes, assignors.)
Carborundum Company, The. (See McMullen, John C., assignor.)
Carlevaro, Joseph P. (See Juslin, V. E., and Carlevaro.)
Carliss, Oswald S., Fairfield, assignor to The Kron Company, Bridgeport, Conn. Weighing apparatus with overhead dial unit. 2,310,614; Feb. 9.
Carnegie-Illinois Steel Corporation. (See Greulich, Gerald G., assignor.)
Carnegie-Illinois Steel Corporation. (See Thatcher, F. M., Wells, and Wilson, Jr., assignors.)
Carpenter, John H., Cambridge, Mass., R. B. Kennedy and H. J. McClanahan, Beaumont, Tex., assignors to Socony-Vacuum Oil Company, Incorporated, New York, N. Y. Petroleum distillation. 2,310,837; Feb. 9.
Carruthers, Thomas F., South Charleston, W. Va., assignor to Carbide and Carbon Chemicals Corporation. Ricinoleic acid derivatives. 2,310,395; Feb. 9.
Carter, De Vere V., Dallas, Tex. Double pinion application of power. 2,310,393; Feb. 9.
Cartmell, Joseph B. (See Dooley, William D., assignor.)
Carton Development Corporation. (See Cole, Arthur E. assignor.)
Cartwright, Oscar L., York, Nebr. Punchboard. 2,310,574; Feb. 9.
Case, Lewis B., St. Louis, Mo. Check. 2,310,394; Feb. 9.
Cattaneo, Alfred G., Berkeley, assignor to Shell Development Company, San Francisco, Calif. Ignition system for internal combustion engines. 2,310,575; Feb. 9.
Century Electric Company. (See Schiff, Martin, assignor.)
Celanese Corporation of America. (See Finlayson, D., Greenwood, and Latham, assignors.)
Chatfield, Franklin, and J. M. Lindh, assignors to Munsingwear, Inc., Minneapolis, Minn. Man's undergarment. 2,310,839; Feb. 9.
Chemical Novelties Corporation. (See Ginn, Wells W., assignor.)
Chenicek, Joseph A. (See Rosenwald, R. H., and Chenicek.)
Chester, Dorothy G., Daytona Beach, Fla. Nursing bottle and nipple guard. 2,310,515; Feb. 9.
Chicago Bridge & Iron Company. (See Larson, Donald E., assignor.)
Chicago Pneumatic Tool Company. (See Fischer, Howard R., assignor.)
Christian, Henry C., Berkeley, assignor of ½ to E. W. Stryker, Albany, Cal. Axle puller. 2,310,615; Feb. 9.
Chromogen, Incorporated. (See Gáspár, Béla.)
Cislak, Francis E., and M. M. Otto, assignors to Reilly Tar & Chemical Corporation, Indianapolis, Ind. Separation of metacresol and paracresol. 2,310,616; Feb. 9.
Cities Service Oil Company. (See Sullivan, Alan P., assignor.)
Claremont Waste Manufacturing Company. (See Hauge, Andrew, assignor.)
Clark, George H., Washtenaw County, assignor to Square D Company, Detroit, Mich. Valve. 2,310,516; Feb. 9.
Clawson, Ira C., Los Angeles, Calif. Drill with adjustable head. 2,310,759; Feb. 9.
Cleveland Brass Manufacturing Company. (See Roach, Nathan, assignor.)
Cline, McGarvey, Jacksonville, Fla. Continuous retort. 2,310,215; Feb. 9.
Clinkscales, Austin B., Jr., Greenville, Miss. Grader blade. 2,310,396; Feb. 9.
Coberly, Clarence J., Los Angeles, assignor to Kobe, Inc., Huntington Park, Calif. Packing wells. 2,310,397; Feb. 9.
Cole, Arthur E., West Haven, Conn., assignor by mesne assignments to Carton Development Corporation, New York, N. Y. Cover construction. 2,310,398; Feb. 9.
Collier, Freeman E., assignor to Foley Manufacturing Company, Minneapolis, Minn. Saw filing machine. 2,310,517; Feb. 9.
Colonial Knife Company. (See Paolantonio, Antonio, assignor.)
Columbus Show Case Company, The. (See Teach, Max K., assignor.)
Commonwealth Engineering Company of Ohio. (See Stahly, Grant L., assignor.)
Conmar Products Corporation. (See Greene, Martin, assignor.)
Conmar Products Corporation. (See Ulrich, Frederick, assignor.)
Conner, Michael, assignor to Sugar Beet Products Company, Saginaw, Mich. Wash fountain. 2,310,617; Feb. 9.
Connolly, Gerald C., Baton Rouge, La., assignor to Standard Catalytic Company. Hydrogenating with catalyst. 2,310,278; Feb. 9.
Consolidated Instruments Corporation. (See Robinson, Claude L., assignor.)
Consolidated Packaging Machinery Corporation. (See Allen, Howard G., assignor.)
Continental Scale Corporation. (See Weber, M. J., and Vanderhoff, assignors.)
Coons, Curtis C., and C. G. Puchy, assignors to The Hoover Company, North Canton, Ohio. Refrigeration. 2,310,760; Feb. 9.
Cooper-Bessemer Corporation. (See Bovard, Charles M., assignor.)
Cords, William, San Diego, Calif. Piston packing device. 2,310,352; Feb. 9.
Coreco, Inc. (See Murphy, Harry S., assignor.)
Cornell Securities Corporation. (See Van Horn, Arthur H., assignor.)
Cox, Frederick G., Metuchen, N. J., assignor to General Cable Corporation, New York, N. Y. Cable terminal. 2,310,201; Feb. 9.

Cox, Henry L., and A. C. Plewes, South Charleston, W. Va., assignors to Carbide and Carbon Chemicals Corporation. Distillation process and apparatus. 2,310,399; Feb. 9.
Crabtree, Hedley S., Caterham, England. Lifesaving cushion. 2,310,840; Feb. 9.
Crabtree, John I. (See Eaton, G. T., and Crabtree.)
Craig, Palmer M. (See McCoy, C. T., and Craig.)
Crandall, George S. (See Badertscher, D. E., Crandall and Seger.)
Crandell, Dean D., assignor to National Gypsum Company, Buffalo, N. Y. Wallboard. 2,310,216; Feb. 9.
Crandell, Dean D., assignor to National Gypsum Company, Buffalo, N. Y. Wallboard. 2,310,217; Feb. 9.
Crane, Clayton O., and P. J. Mulligan, Denver, Colo., assignors to United States Rubber Company, New York, N. Y. Form liner. 2,310,400; Feb. 9.
Crane Co. (See Ziegler, N. A., and Northrup, assignors.)
Crew, Morris W., and J. W. Meyer, Shaker Heights, assignors to The Hotstream Heater Company, Cleveland, Ohio. Barometric regulator. 2,310,678; Feb. 9.
Cromogen, Incorporated. (See Gáspár, Béla, assignor.)
Cross, Thomas, Jr. (See Smyers, W. H., and Cross, Jr.)
Crossley, Royal E., Fayetteville, assignor to Crouse-Hinds Company, Syracuse, N. Y. Lighting unit. 2,310,618; Feb. 9.
Crouse-Hinds Company. (See Crossley, Royal E., assignor.)
Crown Cork & Seal Company. (See Goebel, G., and Wilckens, assignors.)
Curtis Pump Company. (See Curtis, William H., assignor.)
Curtis, William H., assignor to Curtis Pump Company, Dayton, Ohio. Device for fabricating pump impellers. 2,310,841; Feb. 9.
Cutler-Hammer, Inc. (See Kuhn, C. W., and Seeger, assignors.)
Dahlbom, Carl A., Brooklyn, and R. B. Hearn, Hollis, assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telegraph system. 2,310,279; Feb. 9.
Daiger, George P., Canton, assignor to The Hoover Company, North Canton, Ohio. Refrigeration. 2,310,761; Feb. 9.
D'Alelio, Gaetano F., Pittsfield, Mass., assignor to General Electric Company. Interpolymers of diallyl itaconate and ethyl methacrylate. 2,310,731; Feb. 9.
Daumiller, Guenther. (See Reppe, W., Steinhofer, and Daumiller.)
Daumiller, Guenther, and G. Hoffman, Ludwigshafen-on-the-Rhine, Germany; vested in the Alien Property Custodian. Production of aromatic vinyl compounds. 2,310,762; Feb. 9.
Dautrick, Owen L., Ferndale, and S. J. Dautrick, Detroit, Mich. Window structure. 2,310,401; Feb. 9.
Dautrick, Stewart J. (See Dautrick, Owen L., and Stewart, J.)
Davies, Clarence J. and A. C. Lind, assignors to National Automotive Fibres, Inc., Detroit, Mich. Blind molding. 2,310,763; Feb. 9.
Davis, Wayne A., Minneapolis, Minn. Pin setting apparatus. 2,310,218; Feb. 9.
Davitt, Margaret M. M., and J. E. M. Wendell, Rensselaer, N. Y. Tieback holder. 2,310,842; Feb. 9.
De Cordova, Leander. (See Blackburn, L. I., and De Cordova.)
Deere & Company. (See Silver, Walter H., assignor.)
Defender Photo Supply Co. (See Lines, F. H., and Towle, Sr., assignors.)
De Ganahl, Joe, McLean, Va. Match package. 2,310,219; Feb. 9.
De Groote, Melvin, and B. Keiser, St. Louis, Mo., assignors to Petrolite Corporation, Ltd., Wilmington, Del. Oxyalkylated lecithin and making same. 2,310,679; Feb. 9.
De Long, Herbert K., assignor to The Dow Chemical Company, Midland, Mich. Coloring protective coating on magnesium and its alloys. 2,310,487; Feb. 9.
De Michelis, Peter, assignor of one-half to P. J. Feykert, San Francisco, Calif. Propulsion mechanism. 2,310,220; Feb. 9.
Denhof, Harold H., New York, N. Y. Apparatus for dyeing threads or yarns for textile machines and the like. 2,310,764; Feb. 9.
Dennison, Brook J., Aspinwall, assignor to Pittsburgh Plate Glass Company, Allegheny County, Pa. Glass insulation unit. 2,310,402; Feb. 9.
Dentists' Supply Company of New York, The. (See Dietz, Charles, assignor.)
Denyes, Russell O., Pittsburgh, Pa., assignor to Tubize Chatillon Corporation. Artificial filament and the like. 2,310,221; Feb. 9.
Derham, Philip A., and J. H. Newport, Jr., Rosemont, Pa., assignors to Victor Metal Products Corporation, Brooklyn, N. Y. Inhaler. 2,310,681; Feb. 9.
Desmone, John A. (See Knudsen, P. E., and Desmone.)
Detroit Lubricator Company. (See Russel, Philip S., assignor.)
Detroit Rex Products Company. (See Dinley, Clarence F., assignor.)
Dettmer, Albert B., assignor to The K-D Lamp Company, Cincinnati, Ohio. Rear view mirror and bracket. 2,310,353; Feb. 9.
Deverall, Charles N., Buffalo, assignor to Niagara Blower Company, New York, N. Y. Unit air conditioner. 2,310,222; Feb. 9.
Deysher, Raymond H., Fleetwood, Pa. Thermoelectric cell. 2,310,354; Feb. 9.
Diaz, O'Neal A. (See Allison, Oliver J., assignor.)
Dice, Charles, Mount Vernon, Ohio, assignor to Pittsburgh Plate Glass Company, Allegheny County, Pa. Cutoff device. 2,310,403; Feb. 9.
Dietz, Charles, York, Pa., assignor to The Dentists' Supply Company of New York, New York, N. Y. Alloy and dental article. 2,310,732; Feb. 9.
Di Ienno, John J. (See Stuber, W. J., and Di Ienno.)
Dillehay, Edward R., Glen Ellyn, Ill., assignor to The Richardson Company, Lockland, Ohio. Manufacture of hard rubber panels. 2,310,619; Feb. 9.
Dimgor Corp. (See Gorbatenko, Dimitri L., assignor.)
Dinley, Clarence F., assignor, by mesne assignments, to Detroit Rex Products Company, Detroit, Mich. Solvent saver. 2,310,680; Feb. 9.
Ditzler, John L., Springfield, Mass., assignor to Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa. Air conditioning apparatus. 2,310,843; Feb. 9.
Dodge, Eugene W., Shafter, assignor of 12½% to H. Rhyne and 12½% to C. F. Wentworth, both of Long Beach, Calif. Chemical liquid pressure injector. 2,310,576; Feb. 9.
Dodge, Howard M., Wabash, Ind., assignor to The General Tire & Rubber Company, Summit, Ohio. Apparatus for the production of molded articles. 2,310,404; Feb. 9.
Dodge, Howard M., Wabash, Ind., assignor to The General Tire & Rubber Company, Summit, Ohio. Oil seal. 2,310,405; Feb. 9.
Dolza, John, Flint, assignor to General Motors Corporation, Detroit, Mich. Vacuum control of clutch capacity. 2,310,518; Feb. 9.
Dooley, William D., assignor to J. B. Cartmell, Springfield, Ohio. Method and apparatus for selecting fertile from infertile eggs. 2,310,682; Feb. 9.
Dornauf, Joseph, Frankfort-on-the-Main, Germany; vested in the Alien Property Custodian. Casting metals. 2,310,766; Feb. 9.
Dornier, Claude, Friedrichshafen-on-the-Bodensee, Germany; vested in the Alien Property Custodian. Aircraft structure. 2,310,765; Feb. 9.
Doughnut Corporation of America. (See Russell, Lewis E., assignor.)
Douglas Aircraft Company. (See Burton, Edward F., assignor.)
Douglas Aircraft Company. (See Turton, Robert S., assignor.)
Dow Chemical Company, The. (See De Long, Herbert K., assignor.)
Dow Chemical Company, The. (See Pye, David J., assignor.)
Draeger, Walter A., Dawson, N. Dak. Electric knife with changeable points. 2,310,844; Feb. 9.
Dudley, Roy A., assignor to Armstrong Products Corporation, Huntington, W. Va. Ceramic heating element and gas heater embodying the same. 2,310,406; Feb. 9.
Duke, Charles A., San Antonio, Tex. Internal combustion engine. 2,310,733; Feb. 9.
Dunlop Rubber Company Limited. (See Trevaskis, Henry, assignor.)
Dunwell, Stephen W., Endicott, and J. N. Wheeler, Hawthorne, assignors to International Business Machines Corporation, New York, N. Y. Machine for checking quotient results. 2,310,407; Feb. 9.
Du Pont, E. I., de Nemours & Company. (See Hanford, W. E., and Mochel, assignors.)
Du Pont, E. I., de Nemours & Company. (See Hunt, M., and Kirby, assignors.)
Du Pont, E. I., de Nemours & Company. (See Leavy, Joseph B., assignor.)
Du Pont, E. I., de Nemours & Company. (See Lontz, John F., assignor.)
Du Pont, E. I., de Nemours & Company. (See Pitman, Earle C., assignor.)
Du Pont, E. I., de Nemours & Company. (See Sauer, John C., assignor.)
Durr, Lüdwig, Friedrichshafen-on-the-Bodensee, Germany; vested in the Alien Property Custodian. Water recovery device for airships. 2,310,767; Feb. 9.
Dye, Edward R., assignor to Executive Board of Montana State College, Bozeman, Mont. Dusting machine. 2,310,620; Feb. 8.
Eastin, Ralph O., Mountain Grove, Mo. Cream separator. 2,310,355; Feb. 9.
Eastman Kodak Company. (See Eaton, G. T., and Crabtree, assignors.)
Eastman Kodak Company. (See Robertson, Alfred C., assignor.)
Eaton, George T., and J. I. Crabtree, assignors to Eastman Kodak Company, Rochester, N. Y. Liquid hardener solution. 2,310,223; Feb. 9.
Eberhardt, Daniel A., St. Louis, Mo. Rolling of flat strips. 2,310,356; Feb. 9.
Eckhardt, Walter L., Overbrook, assignor to Hygeian Corporation, Philadelphia, Pa. Sterilizing cabinet. 2,310,768; Feb. 9.
Edelberg, William. (See Krasnow, S., and Edelberg.)

Edelman, Beril, Brooklyn, assignor to Western Electric Company, Incorporated, New York, N. Y. Adjustable camlike control apparatus. 2,310,357; Feb. 9.
Edwards, Barton R., Berkeley, Calif. Biscuit cutting device. 2,310,224; Feb. 9.
Edwards, Harold, Syracuse, and R. B. Nelson, Onondaga, assignors to The O. M. Edwards Company, Inc., Syracuse, N. Y. Window construction unit. 2,310,621; Feb. 9.
Edwards, O. M., Company, The. (See Edwards, H., and Nelson, assignors.)
Ehlert, William A. (See Gaines, F. W., and Ehlert.)
Ehlert, William A. (See Gaines, F. W., 3rd, and Ehlert.)
Ehrenfeld, Louis, Milwaukee, Wis., assignor to Pabst Brewing Company, Chicago, Ill. Container. 2,310,408; Feb. 9.
Eidco, Incorporated. (See Hokanson, Martin, assignor.)
Eipper, William R., Wilkes-Barre, Pa. Isomerization of fats and oils. 2,310,225; Feb. 9.
Eitel-McCullough, Inc. (See Eitel, W. W., and McCullough, assignors.)
Eitel, William W., San Bruno, and J. A. McCullough, Millbrae, assignors to Eitel-McCullough, Inc., San Bruno, Calif. Electronic tube. 2,310,769; Feb. 9.
Eley, John, Jr. (See Campbell, Rodney B., assignor.)
Ellinwood, Herman R., Hollywood, Calif., assignor to Adel Precision Products Corp. Conduit fastener. 2,310,622; Feb. 9.
Ellis, Greer, Cambridge, Mass., assignor to Magnaflux Corporation, Chicago, Ill. Determining the magnitude of strains in rigid articles. 2,310,845; Feb. 9.
Ellman, Martin M., Rockford, Ill. Dental burr and handpiece assembly. 2,310,409; Feb. 9.
Emmons, William J., Alameda, and Bernard S. Gallagher, Piedmont, Calif. Asparagus processing machine. 2,310,358; Feb. 9.
English Electric Company Limited, The. (See Blandford, Alfred R., assignor.)
Enley, John T., Riverside, N. J., assignor to Metal Craft Manufacturing Company. Skate. 2,310,683; Feb. 9.
Erskine, De Marr M. (See Wilke, W. P., III, and Erskine.)
Eskin, Samuel G., Mount Lebanon, assignor to Robertshaw Thermostat Company, Youngwood, Pa. Regulating device. 2,310,519; Feb. 9.
Esnault-Pelterie, Robert, Boulogne-Billancourt, France; vested in the Alien Property Custodian. Heating and refrigerating process and apparatus. 2,310,520; Feb. 9.
Estey, Roger S. (See Bennett, A. H., and Estey.)
Estey, Roger S., assignor to Spencer Lens Company, Buffalo, N. Y. Polarimetric apparatus. 2,310,623; Feb. 9.
Estey, Roger S., and K. W. Harper, assignors to Spencer Lens Company, Buffalo, N. Y. Colorimeter. 2,310,624; Feb. 9.
Evans, Lacey H. (See Andrews, J. S., Evans, and Huber.)
Evans, Luther W., Richmond, Va. Adjustable rack. 2,310,770; Feb. 9.
Everett, Charles E., assignor to The Massey-Harris Company, Racine, Wis. Self-propelled combine-harvester. 2,310,577; Feb. 9.
Ex-Cell-O Corporation. (See Hoffer, James F., assignor.)
Executive Board of Montana State College. (See Dye, Edward R., assignor.)
Fain, William H. (See Osburn, J. L., and Fain.)
Farry, Otis T., University City, assignor to Wagner Electric Corporation, St. Louis, Mo. Inductive winding. 2,310,684; Feb. 9.
Fawley, Elmer H. (See Bowan, W. J., and Fawley.)
Federal Telephone & Radio Corporation. (See Alford, Andrew, assignor.)
Federal Telephone and Radio Corporation. (See Wheeler, Carson M., assignor.)
Feldman, Abraham G., assignor to Storkline Furniture Corporation, Chicago, Ill. Floor construction. 2,310,734; Feb. 9.
Ferguson, James R., Royal Oak, assignor to Packard Motor Car Company, Detroit, Mich. Motor vehicle. 2,310,410; Feb. 9.
Ferrex Corporation. (See Gersman, Harvey M., assignor.)
Fessler, Albra H., and A. P. Watts, Flint, assignors to General Motors Corporation, Detroit, Mich. Firing ceramic ware. 2,310,578; Feb. 9.
Feykert, Peter J. (See De Michelis, P., and Feykert.)
Finlayson, Donald, E. L. Greenwood, and L. Latham, Spondon, near Derby, England, assignors to Celanese Corporation of America. Cord assembly, particularly for parachutes. 2,310,359; Feb. 9.
Finnell System, Inc. (See Lewis, Russell K., assignor.)
Fischer, Abraham, Brooklyn, N. Y. Registering bite rims or blocks. 2,310,360; Feb. 9.
Fisher, Ernest F., Passaic, N. J. Air and gas washer. 2,310,411; Feb. 9.
Fischer, Howard R., Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Compression riveter. 2,310,625; Feb. 9.
Flakeice Corporation. (See Short, Frank, assignor.)
Flanders, Warren B., Philadelphia, assignor to Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa. Vibration dampener. 2,310,412; Feb. 9.
Foley Manufacturing Company. (See Collier, Freeman E., assignor.)
Foote-Burt Company, The. (See Ruppel, Harry W., assignor.)
Forberg, Albert, assignor to National Broach & Machine Company, Detroit, Mich. Cutting tool. 2,310,579; Feb. 9.
Ford, Charles R., St. Louis, Mo. System and apparatus for propelling boats. 2,310,361; Feb. 9.
Ford Motor Company. (See Galamb, Joseph, assignor.)
Forter-Teichmann Company. (See Snyder, Harold H., assignor.)
Forter-Teichmann Company. (See Teichmann, Henry F., assignor.)
Foxboro Company, The. (See Frymoyer, Webster W., assignor.)
Franke, August J., assignor to Standard Tool and Manufacturing Co., Arlington, N. J. Chuck. 2,310,580; Feb. 9.
Frankfort Distilleries, Incorporated. (See Veeneman, William H., assignor.)
Franz, Anselm, Dessau, Germany; vested in the Alien Property Custodian. Exhaust conduit construction. 2,310,771; Feb. 9.
Fraser, Douglas, & Sons Limited. (See Fraser, Gordon S., assignor.)
Fraser, Gordon S., assignor to D. Fraser & Sons Limited, Arbroath, Angus, Scotland. Wharve-driven flier spindle. 2,310,685; Feb. 9.
Frass, Hugo. (See Koppelmann, F., Frass, and Penk.)
Freeport Sulphur Company. (See Barnett, Maxwell M., assignor.)
Freer, Lloyd W., Superior, Wis. Game. 2,310,686; Feb. 9.
Friden Calculating Machine Co. (See Friden, Carl M. F., assignor.)
Friden, Carl M. F., Oakland, Calif., assignor to Friden Calculating Machine Co., Inc. Calculating machine. 2,310,280; Feb. 9.
Friden, Carl M. F., Oakland, Calif., assignor to Friden Calculating Machine Co., Inc. Calculating machine. 2,310,281; Feb. 9.
Friden, John H., Maplewood, assignor to The Sun Tube Corporation, Hillside, N. J. Collapsible tube filling and sealing machine. 2,310,413; Feb. 9.
Friedman, George, Brightwaters, and A. R. Goldfarb, assignors to Lawrence Richard Bruce, Inc., New York, N. Y. Hair treating compositions. 2,310,687; Feb. 9.
Frissell, Robert R., assignor to The Barr Rubber Products Company, Sandusky, Ohio. Indestructible form for use in the production of inflatable seamless articles. 2,310,362; Feb. 9.
Fritzam, Harry E., Jamaica, and M. J. Brounn, Forest Hills, assignors to Otis Elevator Company, New York, N. Y. Elevator car. 2,910,414; Feb. 9.
Frohlich, Maria A. B. (See Voelkel, John F., assignor.)
Frymoyer, Webster W., assignor to The Foxboro Company, Foxboro, Mass. Method of and apparatus for controlling digesters. 2,310,415; Feb. 9.
Fukal, Alfred F., assignor to W. W. Welch, Cincinnati, Ohio. Plastic fan stand. 2,310,772; Feb. 9.
Fuller Brush Company, The. (See Jones, J. B., and Le Febvre, assignors.)
Fuller, Charles E., Dothan, Ala. Door or window holder. 2,310,688; Feb. 9.
Fuscaldo, Ottavio, Milan, Italy; vested in the Alien Property Custodian. Electromagnetically controlled fuel injection. 2,310,773; Feb. 9.
Gaines, Frederick W., 3rd, Cleveland Heights, and W. A. Ehlert, South Euclid, assignors to The Ajax Manufacturing Company, Euclid, Ohio. Apparatus for operating on wire stock. 2,310,914; Feb. 9.
Gaines, Frederick W., 3rd., Cleveland Heights, and W. A. Ehlert, South Euclid, assignors to The Ajax Manufacturing Company, Euclid, Ohio. Apparatus for drawing and straightening wire stock. 2,310,916; Feb. 9.
Galamb, Joseph, Detroit, assignor to Ford Motor Company, Dearborn, Mich. Bracket. 2,310,416; Feb. 9.
Galanot, Camille P., Alliance, Ohio, and J. A. Watson, Jr., Silver Spring, Md. Traction device. 2,310,846; Feb. 9.
Gallagher, Bernard S. (See Emmons, W. J., and Gallagher.)
Garbe, Howard W., Hinsdale, and H. Saravalli, Chicago, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y. Wiring fixture. 2,310,774; Feb. 9.
Garlinghouse Brothers. (See Mashon, George A., assignor.)
Garrett, John P., Jr. (See Garrett, John P., Sr., assignor.)
Garrett, John P., Sr., assignor of one-third to J. P. Garrett, Jr., Thomaston, Ga. Compression calendar roll for carding machines. 2,310,581; Feb. 9.
Gáspár, Béla, Hollywood, Calif., assignor to Chromogen, Incorporated. Manufacture of photographic materials. 2,310,226; Feb. 9.
Gáspár, Béla, Hollywood, Calif., assignor to Chromogen, Incorporated. Material for the production of multicolor photographs. 2,310,227; Feb. 9.
Gáspár, Béla, Hollywood, Calif., assignor to Chromogen, Incorporated. Manufacture of photographic colloids. 2,310,228; Feb. 9.
Gauss, Michael J., Weskan, Kans. Cylinder adjuster for threshing machines. 2,310,282; Feb. 9.

Gavagnin, Tullio, Genoa-Pegli, Italy; vested in the Alien Property Custodian. Motor tractor. 2,310,775; Feb. 9.
Gay, Paul S., assignor to Wilcox-Gay Corporation, Charlotte, Mich. Combined sound reproducing-recording apparatus. 2,310,229; Feb. 9.
Gay, Vincent B., Clinton, Ohio, assignor to The B. F. Goodrich Company, New York. Tire. 2,310,776; Feb. 9.
Gear Specialties. (See Hale, Charles B., assignor.)
General Cable Corporation. (See Cox, Frederick G., assignor.)
General Electric Company. (See Bartlett, Percy, assignor.)
General Electric Company. (See Buch, R., and Haemmerling, assignors.)
General Electric Company. (See Butler, W. L., and Hausler, assignors.)
General Electric Company. (See D'Alelio, Gaetano F., assignor.)
General Electric Company. (See Lord, Harold W., assignor.)
General Electric Company. (See Payne, John H., assignor.)
General Electric Company. (See Schwarzhaupt, P. J., Killam, and Taylor, assignors.)
General Electric Company. (See Shoults, D. R., and Mansfield, assignors.)
General Electric Company. (See Summerhayes, Harry R., assignor.)
General Electric Company. (See Thumim, Carl, assignor.)
General Electric X-Ray Corporation. (See Atlee, Z. J., and Brackney, assignors.)
General Fireproofing Company, The. (See Straubel, Clarence W., assignor.)
General Mills, Inc. (See Andrews, J. S., Evans, and Huber, assignors.)
General Motors Corporation. (See Brown, Benjamin G., assignor.)
General Motors Corporation. (See Dolza, John, assignor.)
General Motors Corporation. (See Fessler, A. H., and Watts, assignors.)
General Motors Corporation. (See Kamrath, Herbert G., assignor.)
General Motors Corporation. (See Pearce, George C., assignor.)
General Railway Signal Company. (See Henry, William S., assignor.)
General Railway Signal Company. (See Stephenson, James E., assignor.)
General Time Instruments Corporation. (See Hutt, Arthur R., assignor.)
General Tire & Rubber Company, The. (See Dodge, Howard M., assignor.)
General Tire & Rubber Company, The. (See Orr, Glenn H., assignor.)
Gent, Edgar W., Morristown, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Pneumatic ticket sending and receiving valve. 2,310,417; Feb. 9.
Geophysical Research Corporation. (See Blondeau, Ernest E., assignor.)
Gersman, Harvey M., assignor to Ferrex Corporation, New York, N. Y. Extrusion press. 2,310,230; Feb. 9.
Ghertzmann, Ioyno, Saint Mande, France, assignor to International Business Machines Corporation, New York, N. Y. Paper feeding device. 2,310,418; Feb. 9.
Giavotto, Pietro, Genoa, Italy; vested in the Alien Property Custodian. Drop-counting bottle. 2,310,777; Feb. 9.
Gibson, Ansel B., Toronto, Ontario, Canada. Automatic weighing machine. 2,310,689; Feb. 9.
Gillette Safety Razor Company. (See Graham, George A., assignor.)
Gilliland, Edwin R., Cambridge, Mass., assignor to Standard Oil Development Company. Preparation of alkyl esters. 2,310,283; Feb. 9.
Gilli, Paul, Vienna, Germany; vested in the Alien Property Custodian. Cab for fireless locomotives. 2,310,778; Feb. 9.
Ginn, Wells W., assignor, by mesne assignments, to Chemical Novelties Corporation, Cincinnati, Ohio. Varnish. 2,310,419; Feb. 9.
Glann, George W., Sioux City, Iowa. Dispenser. 2,310,848; Feb. 9.
Gleason Works. (See Wildhaber, Ernest, assignor.)
Goebel, George, deceased, late of Baltimore, Md., by H. Goebel, administratrix, and E. A. Wilckens, assignors to Crown Cork & Seal Company, Inc., Baltimore, Md. Printing press dampening roll control. 2,310,363; Feb. 9.
Goebel, Helen, administratrix. (See Goebel, G., and Wilckens.)
Gold, Jacob, Newton, N. J. Motor driven toothbrush. 2,310,626; Feb. 9.
Gold, Richard, Birmingham, England. Dynamoelectric machine. 2,310,422; Feb. 9.
Gold, Richard, Birmingham, England. Preventing leakage of fluid through electric cables. 2,310,423; Feb. 9.
Golden State Company. (See Peebles, David D., assignor.)
Goldfarb, Abraham R. (See Friedman, G., and Goldfarb.)
Goldsmith Bros. Smelting & Refining Company. (See Goldsmith, Melvin M., assignor.)
Goldsmith, Melvin M., Chicago, Ill., assignor to Goldsmith Bros. Smelting & Refining Company. Brazing solder. 2,310,231; Feb. 9.
Goodenough, Ernest F. (See Rust, N. M., Brailsford, and Goodenough.)
Goodman, Mac, New York, N. Y. Luminescent composition and producing the same. 2,310,424; Feb. 9.
Goodman, Mac, New York, N. Y. Luminescent product and producing the same. 2,310,425; Feb. 9.
Goodman Manufacturing Company. (See Pray, Thomas E., assignor.)
Goodman, Reuben E., Lowell, Mass. Table. 2,310,521; Feb. 9.
Goodrich, B. F., Company, The. (See Gay, Vincent B., assignor.)
Goodrich, B. F., Company, The. (See Haren, U. C., and Sapp, assignors.)
Goodrich, B. F., Company, The. (See Van Orden, Paul W., assignor.)
Gorbatenko, Dimitri L., assignor to Dimgor Corp., San Francisco, Calif. Single roll tape dispenser. 2,310,522; Feb. 9.
Graham, Duncan E., Denver, Colo. Container. 2,310,420; Feb. 9.
Graham, George A., assignor to Gillette Safety Razor Company, Boston, Mass. Safety razor container. 2,310,849; Feb. 9.
Grau-Küpfer, Ernst, Kerzers, Switzerland. Shoe tree. 2,310,847; Feb. 9.
Greene, Martin, New York, N. Y., assignor to Conmar Products Corporation, Bayonne, N. J. Padlocked slider for slide fasteners. 2,310,627; Feb. 9.
Greenwood, Ernest L. (See Finlayson, D., Greenwood, and Latham.)
Greenwood, Henry B., assignor to F. X. Hooper Company, Inc., Glen Arm, Md. Corrugator. 2,310,421; Feb. 9.
Greer, Jesse O., Robert Lee, Tex. Excavator. 2,310,735; Feb. 9.
Greulich, Gerald G., Mount Lebanon, assignor to Carnegie-Illinois Steel Corporation, Pittsburgh, Pa. Portable deck. 2,310,426; Feb. 9.
Greulich, Gerald G., Mount Lebanon, assignor to Carnegie-Illinois Steel Corporation, Pittsburgh, Pa. Portable deck. 2,310,427; Feb. 9.
Griffinger, Harry, et al. (See Berkner, Arthur K., assignor.)
Griffith, Enoch L., assignor to The Griffith Laboratories, Inc., Chicago, Ill. Cooking food by electric conductance. 2,310,690; Feb. 9.
Griffith Laboratories, Inc., The. (See Griffith, Enoch L., assignor.)
Griffith Laboratories, Inc., The. (See Whitchurch, Ellwood F., assignor.)
Groene, William F., assignor to The R. K. LeBlond Machine Tool Company, Cincinnati, Ohio. Toolholder for lathes. 2,310,691; Feb. 9.
Groll, Herbert P. A., Hamburg-Wellingsbuttel, G. W. Hearne and G. E. G. von Stietz, Berkeley, assignors to Shell Development Company, San Francisco, Calif. Production of diolefines. 2,310,523; Feb. 9.
Grove, Marvin H., Piedmont, Calif. Flow control valve. 2,310,628; Feb. 9.
Grover, Garrison P., Minneapolis, Minn., assignor to Burke & James, Inc. Camera. 2,310,850; Feb. 9.
Gruender, Oscar C., assignor to Nordberg Manufacturing Co., Milwaukee, Wis. Double screen structure. 2,310,736; Feb. 9.
Gruender, Oscar C., assignor to Nordberg Manufacturing Company, Milwaukee, Wis. Shaftless cone crusher and tilting member therefor. 2,310,737; Feb. 9.
Guinot, Henri M., Niort, Deux-Sevres, France; vested in the Alien Property Custodian. Hydration of olefins. 2,310,911; Feb. 9.
Guite, Roy W., assignor to The American Foundry Equipment Company, Mishawaka, Ind. Blast cleaning apparatus. 2,310,488; Feb. 9.
Gulf Research & Development Company. (See Weinrich, W. W., and Loew, assignors.)
Gurries, Albert G., Gilroy, Calif. Front end loader. 2,310,284; Feb. 9.
Gustafson, Gilbert E., assignor to Zenith Radio Corporation, Chicago, Ill. Frequency modulation receiver. 2,310,896; Feb. 9.
Haarhoff, Daniel van der M., Alberton, assigner to Anti-Abradants (Proprietary) Limited, Johannesburg, Union of South Africa. Protection of pump surfaces. 2,310,629; Feb. 9.
Haemmerling, Friedrich. (See Buch, R., and Haemmerling.)
Haines, John E., G. F. Laing, and S. W. Nickells, Chicago, Ill., assignors to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Damper controller. 2,310,364; Feb. 9.
Hale, Charles B., assignor to Gear Specialties, Chicago, Ill. Preloaded gears. 2,310,232; Feb. 9.
Hall, Erik H., Wilkinsburg, and R. H. Leitzel, Forest Hills, assignors to Westingthouse Electric & Manufacturing Company, East Pittsburgh, Pa. Circuit interrupter. 2,310,779; Feb. 9.
Hall, John A., Summit, and J. W. Schmied, Madison, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y. Automatic teletypewriter operation. 2,310,428; Feb. 9.

Halliburton Oil Well Cementing Company. (See Wickersham, Newton W., assignor.)
Halstead, John F., Brooklyn, N. Y., assignor to International Cigar Machinery Company. Cigar bunch separating mechanism. 2,310,489; Feb. 9.
Hammond Instrument Company. (See Hanert, John M., assignor.)
Hancock, William T., Long Beach, Calif. Polymerizing and cracking petroleum hydrocarbons. 2,310,630; Feb. 9.
Hanert, John M., Wilmette, assignor to Hammond Instrument Company, Chicago, Ill. Electrical musical instrument. 2,310,429; Feb. 9.
Hanford, William E. and W. E. Mochel, assignors to E. I. du Pont de Nemours & Company, Wilmington, Del. Vinyl esters of tertiary carboxylic acids. 2,310,780; Feb. 9.
Hanger, Arnold. (See Parker, L. F., and Hanger.)
Hansell, Clarence W., Port Jefferson, N. Y., assignor to Radio Corporation of America. Photo voltaic cell. 2,310,365; Feb. 9.
Hansell, Clarence W., Port Jefferson, N. Y., assignor to Radio Corporation of America. Reducing multiple signals. 2,310,692; Feb. 9.
Hansell, Grant E., Riverhead, N. Y., assignor to Radio Corporation of America. Voltage regulating system. 2,310,286; Feb. 9.
Hansen, William A., Dos Palos, Calif. Automatic shut-off valve for filling spouts. 2,310,631; Feb. 9.
Hanson, Oscar B., Westport, Conn., assignor to Radio Corporation of America. Television transmitting system. 2,310,285; Feb. 9.
Haren, Urban C., Akron, and J. P. Sapp, Kent, Ohio, assignors to The B. F. Goodrich Company, New York, N. Y. Apparatus for making laminated strips. 2,310,851; Feb. 9.
Harman, Frank B., Grand Rapids, Mich. Posture chair. 2,310,366; Feb. 9.
Harper, Kennard W. (See Estey, R. S., and Harper.)
Harrington, Joseph, Riverside, Ill. Conveyer-excavator. 2,310,233; Feb. 9.
Harris, Vincent C., Wilmette, Ill. Toy. 2,310,781; Feb. 9.
Hart, Robert E., Poughkeepsie, assignor to International Business Machines Corporation, New York, N. Y. Carriage control mechanism. 2,310,430; Feb. 9.
Hart, Roy E., Stockton, Calif. Trailer. 2,310,431; Feb. 9.
Hartford-Empire Company. (See Campbell, V. D., and Wise, assignors.)
Hartford-Empire Company. (See Honiss, William T., assignor.)
Hartford-Empire Company. (See Mulholland, Vergil, assignor.)
Harwood, Asa J., Richmond, Ind., assignor to The Atlas Underwear Company, Piqua, Ohio. Undergarment. 2,310,367; Feb. 9.
Hastings Manufacturing Company. (See Phillips, Harold P., assignor.)
Hatfield, John C., assignor of ½ to H. E. Holm, Tulsa, Okla. Paper pencil holder. 2,310,632; Feb. 9.
Haug, John S., Philadelphia, Pa., assignor to United Engineers & Constructors, Inc. Gas condenser. 2,310,234; Feb. 9.
Hauge, Andrew, Claremont, N. H., assignor to Claremont Waste Manufacturing Company. Flock cutter. 2,310,235; Feb. 9.
Hauge, Andrew, Claremont, N. H., assignor to Claremont Waste Manufacturing Company. Flock cutting machine. 2,310,236; Feb. 9.
Hausbeck, Charles, New York, N. Y. Combined holder for screw and screw drivers. 2,310,287; Feb. 9.
Hausler, George M. (See Butler, W. L., and Hausler.)
Haux, Elmer H., Tarentum, assignor to Pittsburgh Plate Glass Company, Allegheny County, Pa. Composite building unit. 2,310,432; Feb. 9.
Haywood, Gerald, Westernport, Md., assignor to West Virginia Pulp and Paper Company, New York, N. Y. Satin white and making the same. 2,310,693; Feb. 9.
Hearn, Richard B. (See Dahlbom, C. A., and Hearn.)
Hearne, George W. (See Groll, H. P. A., Hearne, and von Stietz.)
Heimann, Walter, Berlin, Germany; vested in the Alien Property Custodian. Electronic television transmitter. 2,310,782; Feb. 9.
Heimburger, Douglas D., Beverly Hills, assignor to Kelite Products, Inc., Los Angeles, Calif. Spraying apparatus. 2,310,633; Feb. 9.
Heller, William F., Norwood, assignor to A. F. Ward, Cincinnati, Ohio. Sectional die. 2,310,525; Feb. 9.
Helmbold, Johann-Georg, Berlin, Germany; vested in the Alien Property Custodian. Measuring device. 2,310,783; Feb. 9.
Helprin, David T., New York, N. Y. Paper cutter. 2,310,838; Feb. 9.
Helsten, Wesley A. (See Tack, C. E., and Helsten.)
Henry, Robert W., Bartlesville, and J. V. Montgomery, Okmulgee, Okla., assignors to Phillips Petroleum Company. Solvent extraction of hydrocarbon materials. 2,310,524; Feb. 9.
Henry, William S., Chili, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Highway crossing gate for railroads. 2,310,694; Feb. 9.
Hepp, Carlos A., Palisade, assignor to Alfred Hofmann Inc., West New York, N. J. Welt mechanism for knitting machines. 2,310,368; Feb. 9.
Herbert, Wilhelm, Frankfort-on-the-Main-Eschersheim Germany; vested in the Alien Property Custodian. Preparation of gas mixtures for catalytic processes. 2,310,784; Feb. 9.
Hercules Powder Company. (See Barab, Jacob, assignor.)
Hercules Powder Company. (See Rummelsburg, Alfred L., assignor.)
Herrmann, Conrad, Wuppertal-Elberfeld, Germany; vested in the Alien Property Custodian. Upholstering material. 2,310,785; Feb. 9.
Hester, Thomas M., Hawthorne, Calif. Weatherstrip for doors and the like. 2,310,433; Feb. 9.
Heywood-Wakefield Company. (See Bell, Alfred B., assignor.)
Hicks, Walter L., Trion, Ga. Shuttle box. 2,310,369; Feb. 9.
Higgins, William H. C., West Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Oscillating system. 2,310,695; Feb. 9.
Hildebrand, Ralph L., Lakewood, Ohio, assignor to Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa. Electrical dust-precipitator indicating system. 2,310,786; Feb. 9.
Hoffer, James F., assignor to Ex-Cell-O Corporation, Detroit, Mich. Pump structure. 2,310,370; Feb. 9.
Hoffmann, Gunthard. (See Daumiller, G., and Hoffmann.)
Hokanson, Martin, assignor to Eidco, Incorporated, Duluth, Minn. Drill bit. 2,310,288; Feb. 9.
Hokanson Martin, assignor to Eidco, Incorporated, Duluth, Minn. Drill bit. 2,310,289; Feb. 9.
Hoke Incorporated. (See Teeters, W. O., and Salmon., assignors.)
Holden, William H. T., Woodside, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Communication system. 2,310,634; Feb. 9.
Holm, Henry E. (See Hatfield, John C., assignor.)
Holmann, Alfred, Inc. (See Hepp, Carlos A., assignor.)
Holophane Company. (See Rolph, Thomas W., assignor.)
Homfeldt, William, Azcapotzalco, D. F., Mexico. Automatic water feeder for boilers. 2,310,696; Feb. 9.
Honiss, William T., West Hartford, assignor to Hartford Empire Company, Hartford, Conn. Feeding molten glass in plural charges. 2,310,290; Feb. 9.
Hooper, F. X., Company. (See Greenwood, Henry B., assignor.)
Hoover Company, The. (See Coons, C. C., and Puchy, assignors.)
Hoover Company, The. (See Daiger, George P., assignor.)
Hoover Company, The. (See Siedle, Arnold D., assignor.)
Hope's Windows, Inc. (See Blears, John, assignor.)
Hopkins, Robert K., assignor to The M. W. Kellogg Company, New York, N. Y. Metal fusing apparatus 2,310,635; Feb. 9.
Horn, Clarence A., assignor to Raytheon Production Corporation, Newton, Mass. Molded stem. 2,310,237; Feb. 9.
Horrigan, Joseph R., Houston, Tex. Rock rooter plow. 2,310,526; Feb. 9.
Horsrud, Ole, Fox River Grove, assignor to Sears, Roebuck and Co., Chicago, Ill. Firearm. 2,310,238; Feb. 9.
Horvitz, Leo, assignor to E. E. Rosaire, Houston, Tex. Geochemical prospecting. 2,310,291; Feb. 9.
Hotstream Heater Company, The. (See Crew, M. W., and Meyer, assignors.)
Houdaille-Hershey Corporation. (See Johnson, Bernard C., assignor.)
Houdry Process Corporation. (See Lassait, Raymond C., assignor.)
Howard, Styles T., Jeffersonville, Ind. Automatic cutoff valve. 2,310,636; Feb. 9.
Howell, William, Winnipeg, Manitoba, Canada. Pickup device for airplanes. 2,310,697; Feb. 9.
Hoye, Peder B., Maywood, assignor to Electrical Engineers Equipment Co., Melrose Park, Ill. Friction brake mechanism for motor driven electric switches and the like. 2,310,787; Feb. 9.
Hoyt, Frederick A., East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Coin chute. 2,310,637; Feb. 9.
Hubbard, Elbert B., assignor to Williams Furniture Corporation, Sumter, S. C. Apparatus for driving pins in bedposts. 2,310,638; Feb. 9.
Huber, Louis J. (See Andrews, J. S., Evans, and Huber.)
Hultgren, Arnold P. (See Mitchell, W. G., and Hultgren.)
Hulton, Charles S., assignor to The Kirk & Blum Manufacturing Company, Cincinnati, Ohio. Furnace wall maintenance. 2,310,698; Feb. 9.
Hümmelchen, Wilhelm, Siegburg, Germany; vested in the Alien Property Custodian. Inking printing forms. 2,310,788; Feb. 9.
Humphner, Ferdinand W., Oak Park, assignor to Mid-States Gummed Paper Co., Chicago, Ill. Gummed bodies. 2,310,292; Feb. 9.

Hunt, Madison, and J. E. Kirby, assignors to E. I. du Pont de Nemours & Company, Wilmington, Del. Linear polymeric amidine salts. 2,310,789; Feb. 9.
Hurley, Roy T. (See Briechle, A., Hurley, and Merritt.)
Hurley, Roy T., Dobbs Ferry, N. Y., assignor to Bendix Aviation Corporation, South Bend, Ind. Projectile. 2,310,915; Feb. 9.
Hutt, Arthur R., Thomaston, Conn., assignor to General Time Instruments Corporation, New York, N. Y. Timing mechanism. 2,310,527; Feb. 9.
Hvoslef, Fredrik W., Kohler, Wis. Flue door shield. 2,310,699; Feb. 9.
Hygeian Corporation. (See Eckhardt, Walter L., assignor.)
Hyman, Morris J., Philadelphia, Pa. Combined strap and fastener. 2,310,434; Feb. 9.
Ilford Limited. (See Kendall, John D., assignor.)
Imbt, Herbert. (See Blair, J. I., and Imbt.)
Imperial Chemical Industries Limited. (See Booth, William E., assignor.)
Imperial Chemical Industries Limited. (See Tyerman, William, assignor.)
International Business Machines Corporation. (See Blakely, Robert T., assignor.)
International Business Machines Corporation. (See Dunwell, S. W., and Wheeler, assignors.)
International Business Machines Corporation. (See Ghertzmann, Ioyno, assignor.)
International Business Machines Corporation. (See Hart, Robert E., assignor.)
International Business Machines Corporation. (See Johnson, Reynold B., assignor.)
International Business Machines Corporation. (See Lang, William, assignor.)
International Business Machines Corporation. (See Leathers, Ward, assignor.)
International Business Machines Corporation. (See Watson, Thomas J., assignor.)
International Cigar Machinery Company. (See Halstead, John F., assignor.)
International Detachable Bits & Equipment Limited (See Boyce, George E., assignor.)
Isaacson Iron Works. (See Allin, George S., assignor.)
James Manufacturing Company. (See Markey, George T., assignor.)
Jasco, Incorporated. (See Lightbown, I. E., and McNab, assignors.)
Jefferies, William H. (See Anderson, Charles E., assignor.)
Jefferson, William T., Los Angeles, Calif. Time indicator for clocks and watches. 2,310,582; Feb. 9.
Jenkins, Arthur C., Kenmore, N. Y., assignor to The Linde Air Products Company. Method of and apparatus for gas analysis. 2,310,435; Feb. 9.
Jernstedt, George W., Bloomfield, N. J., assignor to Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa. Corrosion resistant coating for metal surfaces. 2,310,239; Feb. 9.
Joesting, Frederick D., Oak Park, Ill., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Condition responsive controller. 2,310,293; Feb. 9.
Johnson, Bernard C., Libertyville, Ill., assignor to Houdaille-Hershey Corporation, Detroit, Mich. Evaporator. 2,310,906; Feb. 9.
Johnson, Charles E., Jr., Phoenix, Ariz. Bushing tool. 2,310,639; Feb. 9.
Johnson, Charles F., assignor to Reed Roller Bit Company, Houston, Tex. Valve. 2,310,583; Feb. 9.
Johnson, Edward E., Incorporated. (See Bodey, Charles E., Jr., assignor.)
Johnson, Loren E., Lander, Wyo. Adjustable display stand. 2,310,439; Feb. 9.
Johnson, Melvin W., Nutley, N. J., assignor to Pittsburgh Plate Glass Company, Allegheny County, Pa. Printing upon fabrics. 2,310,436; Feb. 9.
Johnson, Reynold B., Binghamton, assignor to International Business Machines Corporation, New York, N. Y. Educational device. 2,310,437; Feb. 9.
Johnson, Reynold B., Binghamton, assignor to International Business Machines Corporation, New York, N. Y. Multiplying device. 2,310,438; Feb. 9.
Johnston, Charles O., Wilmington, Del. Educational and display device. 2,310,738; Feb. 9.
Joncich, Andro. (See Ljubetich, Carmen, and Dominic, Boskovich, and Joncich.)
Jones, James B., West Hartford, and A. L. Le Febvre, assignors to The Fuller Brush Company, Hartford, Conn. Brush making. 2,310,897; Feb. 9.
Joyce, Paul B. (See Schneider, Phillip C., assignor.)
Jungersen, Thoger G., Mimico, Ontario, Canada. Optical reflecting material. 2,310,790; Feb. 9.
Juslin, Victor E., and J. P. Carlevaro, Oakland, assignors, by mesne assignments, to J. T. Kemper, Hayward, Calif. Cable clamp. 2,310,440; Feb. 9.
Just, George A. (See Lunken, E. H., and Just.)
Justrite Manufacturing Company. (See Packer, Charles S., assignor.)
K-D Lamp Company, The. (See Dettmer, Albert B., assignor.)
Kamrath, Herbert G., Flint, assignor to General Motors Corporation, Detroit, Mich. Air cleaner. 2,310,528; Feb. 9.
Katzin, Martin, Riverhead, N. Y., assignor to Radio Corporation of America. Electromagnetic horn antenna. 2,310,294; Feb. 9.
Keck, Walter E., Hancock, Mich. Flotation of ores. 2,310,240; Feb. 9.
Keele, Ralph M., Oakland, Calif. Equipment for permanently waving hair. 2,310,295; Feb. 9.
Keene, Alvin D., assignor to Samson United Corporation, Rochester, N. Y. Thermostatic switch. 2,310,791; Feb. 9.
Keiser, Bernhard. (See De Groote, M., and Keiser.)
Kelite Products, Inc. (See Heimburger, Douglas D., assignor.)
Kellogg, M. W., Company, The. (See Hopkins, Robert K., assignor.)
Kellogg Switchboard and Supply Company. (See Wallace, Bert A., assignor.)
Kelly, Herbert W., Chicago, Ill., assignor to Meehanite Metal Corporation. Magnetic bucket and conveying material. 2,310,241; Feb. 9.
Kemper, John T. (See Juslin, V. E., and Carlevaro, assignors.)
Kendall, John D., assignor to Ilford Limited, Ilford, England. Production of compounds of the cyanine type. 2,310,640; Feb. 9.
Kennedy, Eugene D., assignor to Reed Roller Bit Company, Houston, Tex. Reamer locking device. 2,310,584; Feb. 9.
Kennedy, Robert B. (See Carpenter, J. H., Kennedy, and McClanahan.)
Killam, Kenneth A. (See Schwarzhaupt, P. J., Killam, and Taylor.)
Kinzie, Charles J., Niagara Falls, assignor to The Titanium Alloy Manufacturing Company, New York, N. Y. Zirconium oxide opacifier and making same. 2,310,242; Feb. 9.
Kirby, James E. (See Hunt, M., and Kirby.)
Kirk & Blum Manufacturing Company. (See Hulton, Charles S., assignor.)
Klipsch, Paul W., assignor of twenty per cent to R. L. Smith, Houston, Tex. Horn for loud-speaker. 2,310,243; Feb. 9.
Klum, Blaine, Oakland, Calif. Extensible ladder rig, 2,310,441; Feb. 9.
Klyver, Albert N. (See Regan, J. E., and Klyver.)
Knight, Joie C., Long Beach, Calif. Battery charger. 2,310,700; Feb. 9.
Knopf, Paul, New York, N. Y. Register mechanism. 2,310,296; Feb. 9.
Knox, Samuel L. G., Englewood, N. J., assignor to Lamson Corporation of Syracuse, N. Y. Vertical conveyer system. 2,310,462; Feb. 9.
Knudsen, Percy E., Pittsburgh, assignor to Pittsburgh Plate Glass Company, Allegheny County, Pa. Cellular slab. 2,310,442; Feb. 9.
Knudsen, Percy E., Pittsburgh, and J. A. Desmone, Springdale, Pa., assignors to Pittsburgh Corning Corporation. Wall construction. 2,310,443; Feb. 9.
Kobe, Inc. (See Coberly, Clarence J., assignor.)
Koppelmann, Floris, Berlin-Siemensstadt, H. Frass and R. Penk, Berlin, Germany; vested in the Alien Property Custodian. Converter. 2,310,792; Feb. 9.
Krantz, Edward, deceased, Chicago, Ill., by H. Krantz administratrix, Chicago, Ill., assignor of one-half to H. A. Torstenson, and one-half to V. Pearson, Chicago, Ill. Magazine closure for stapling machines 2,310,529; Feb. 9.
Krantz, Edward, deceased, Chicago, Ill., by H. Krantz, administratrix, assignor of one-half to H. A. Torstenson, and one-half to V. Pearson, Chicago, Ill. Anvil for stapling machines. 2,310,530; Feb. 9.
Krantz, Helen, administratrix. (See Krantz, Edward.)
Krasnow, Samuel, and W. Edelberg, Montreal, Quebec, Canada; said Edelberg assignor to said Krasnow. Cigarette making machine. 2,310,297; Feb. 9.
Kriebel, Ernst, Berlin-Spandau, Germany, assignor to Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa. Dry-type rectifier. 2,310,444; Feb. 9.
Kron Company, The. (See Carliss, Oswald S., assignor.)
Krones, Friedrich. (See Bremer, H., and Krones.)
Kryl, Godfried, Inwood, N. Y., assignor of one-third to A. A. Mott, Cedarhurst, N. Y. Automobile direction indicator. 2,310,793; Feb. 9.
Kuhl, Paul E., Madison, and F. R. Russell, Elizabeth, N. J., assignors to Standard Oil Development Company. Liquid level control device. 2,310,298; Feb. 9.
Kuhn, Clarence W., and E. W. Seeger, Wauwatosa, assignors to Cutler-Hammer, Inc., Milwaukee, Wis. Protective device. 2,310,531; Feb. 9.
Kupfer, Otto L., assignor to Stein, Hall & Company, Inc., New York, N. Y. Resins from fused urea. 2,310,794; Feb. 9.
Labin, Frank R., and S. Szulist, Buffalo, N. Y.; said Szulist assignor to said Labin. Game. 2,310,898; Feb. 9.
Laing, Gordon F. (See Haines, J. E., Laing, and Nickells.)
Lamson Corporation. (See Knox, Samuel, L. G., assignor.)
Lamson Corporation. (See Regan, J. E., and Klyver, assignors.)
Lang, Joseph C., assignor to Bocjl Corporation, Pittsburgh, Pa. Fuel supply and carbureting system for internal combustion engines. 2,310,739; Feb. 9.

Lang, William, assignor to International Business Machines Corporation, New York, N. Y. Perforated record card. 2,310,445; Feb. 9.
Langley, Thomas W., Osterley, assignor to Tecalemit, Limited, Brentford, Middlesex, England. Instrument for indicating the attitude and behavior of aircraft in flight. 2,310,446; Feb. 9.
Langmaid, Charles T., Detroit, Mich. Fastening and locating device. 2,310,532; Feb. 9.
La Piana, Fred G., Forest Hills, N. Y., and H. S. Bosland, Paterson, N. J., assignors to Stein, Hall & Company, Inc., New York, N. Y. Emulsion for treating textiles. 2,310,795; Feb. 9.
Lappin, Ralph W., Salina, Kans. Lawn sprinkler. 2,310,796; Feb. 9.
Larson, Donald E., Chicago, Ill., assignor to Chicago Bridge & Iron Company. Vacuum relief valve. 2,310,447; Feb. 9.
Lasky, Bernard P., Beverly Hills, Calif. Bottle cap and closure. 2,310,299; Feb. 9.
Lassiat, Raymond C., Swarthmore, Pa., assignor to Houdry Process Corporation, Wilmington, Del. Control of cyclic operations. 2,310,244; Feb. 9.
Latham, Leonard. (See Finlayson, D., Greenwood, and Latham.)
Lawson, Paul J., Columbus, Ohio. Treating meat trolleys. 2,310,585; Feb. 9.
Lea, Norman, Brentwood, England, assignor to Radio Corporation of America. Frequency variation compensation circuit. 2,310,797; Feb. 9.
Learnard, Harry D., Andover, N. A. Sykes, Methuen, and A. R. Wachter, Reading, assignors to Pacific Mills, Lawrence, Mass. Fabric treatment. 2,310,245; Feb. 9.
Leathers, Ward, Brooklyn, N. Y., assignor, by mesne assignments, to International Business Machines Corporation. Register mechanism for indicating instruments. 2,310,300; Feb. 9.
Leavy, Joseph B., Newburgh, N. Y., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Adhesive tape. 2,310,740; Feb. 9.
Le Blond, R. K., Machine Tool Company, The. (See Groene, William F., assignor.)
Lee, Harry. (See Müller, R., and Lee.)
Leeds, Jules C., Deal, N. J., assignor to The Manhattan Shirt Company, New York, N. Y. Combination sport and dress shirt. 2,310,899; Feb. 9.
Le Febvre Alfred L. (See Jones, J. B., and Le Febvre.)
Lehmann, Herbert G., Wood-Ridge, N. J., assignor to Automatic Devices Corporation, Bridgeport, Conn. Cigar lighter. 2,310,701; Feb. 9.
Leib, Henry H., Chicago, Ill. Dental apparatus. 2,310,448; Feb. 9.
Leitzel, Raymond H. (See Hall, E. H., and R. H. Leitzel.)
Leveque, Bernard T., Wenham, Mass., assignor to United Shoe Machinery Corporation, Flemington, N. J. Heel-breasting machine. 2,310,301; Feb. 9.
Lever Brothers Company. (See Thomas, R., and Oakley, assignors.)
Leverenz, Humboldt W., South Orange, N. J., assignor to Radio Corporation of America. Luminescent light source and manufacture. 2,310,852; Feb. 9.
Leverenz, Humboldt W., South Orange, N. J., assignor to Radio Corporation of America. Luminescent screen. 2,310,863; Feb. 9.
Lewis, John O., assignor of one-half to A. Muller, New York, N. Y. Spray nozzle. 2,310,798; Feb. 9.
Lewis, Russell K., Elkhart, Ind., assignor to Finnell System, Inc. Floor treating machine. 2,310,302; Feb. 9.
Lieber, Eugene. (See Miller, P., and Lieber.)
Lightbrown, Irving E., and J. G. McNab, Roselle, N. J., assignors, by mesne assignments, to Jasco, Incorporated. Age resisting rubbery material and making. 2,310,449; Feb. 9.
Lind, Alvin C. (See Davies, C. J., and Lind.)
Linde Air Products Company, The. (See Arnoldy, Roman F., assignor.)
Linde Air Products Company, The. (See Jenkins, Arthur C., assignor.)
Lindell, Hjalmar R., Worcester, Mass. Paint brush rack. 2,310,533; Feb. 9.
Lindenblad, Nils E., Rocky Point, N. Y., assignor to Radio Corporation of America. Antenna. 2,310,853; Feb. 9.
Lindh, Jennie M. (See Chatfield, F., and Lindh.)
Lindstrom, Harry E. (See Bohnenblust, Alvin A., assignor.)
Lindstrom, Ture, Edgewood, and J. Sandin, Forest Hills, assignors to Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa. Circuit breaker. 2,310,854; Feb. 9.
Line Material Company. (See Schultz, W. O., and Steinmayer, assignors.)
Lines, Frank H., and R. W. Towle, Sr., assignors to Defender Photo Supply Co., Inc., Rochester, N. Y. Photographic material containing envelope. 2,310,371; Feb. 9.
Ljubetich, Carmen, D. Ljubetich and F. Boskovich, San Pedro, Calif., and A. Joncich, Everett, Wash. Purse seine. 2,310,702; Feb. 9.
Ljubetich, Dominic. (See Ljubetich, Carmen and Dominic, Boskovich, and Joncich. 2,310,702; Feb. 9.
Loew, Edward J. (See Weinrich, W. W. and Loew.)
Lohman Bros. (See Lohman, John T. and Rowland L., assignors.)
Lohman, John T., Los Angeles, and R. L. Lohman, North Hollywood, assignors to Lohman Bros., Los Angeles, Calif. Preventing backflow in plumbing systems. 2,310,586; Feb. 9.
Lohman, Rowland L. (See Lohman, John T., and Rowland L.)
Longdin, Harry W., Atlanta, assignor, by mesne assignments, of one-third to J. V. Malcolm, Jr., Decatur, and one-third to J. C. Stanley, Fulton County, Ga. Fillerstractor. 2,310,450; Feb. 9.
Lontz, John F., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Pest control composition. 2,310,799; Feb. 9.
Lord, Harold W., Schenectady, N. Y., assignor to General Electric Company. Electric translating apparatus. 2,310,741; Feb. 9.
Lord, Harold W., Schenectady, N. Y., assignor to General Electric Company. Transformer. 2,310,742; Feb. 9.
Lovell, Dale E. (See Bush, P. L., and Lovell.)
Lowe, Joe, Corporation. (See Overland, Leo D., assignor.)
Lucas Machine Tool Company, The. (See Stephan, Hallis N., assignor.)
Lumelite Corporation. (See Williams, Harold W., assignor.)
Lundeen, Chester A., Los Angeles, assignor to Byron Jackson Co., Huntington Park, Calif. Pipe tong. 2,310,246; Feb. 9.
Lunken, Edmund H., Hartsdale, and G. A. Just, assignors to Lunken-Just Window Corporation, Scarsdale, N. Y. Window. 2,310,247; Feb. 9.
Lunken-Just Window Corporation. (See Lunken, E. H., and Just, assignors.)
Lux, Eugene, assignor to Bulova Watch Company, Incorporated, New York, N. Y. Display box. 2,310,641; Feb. 9.
Lyon Metal Products, Incorporated. (See Bales, James E., assignor.)
MacIver, Charles P. (See Beckwith, E. L., and MacIver.)
MacNeil, George L., Reading, Pa. Self-cleaning strainer. 2,310,587; Feb. 9.
Mages, Morris, assignor to V. Mueller & Company, Chicago, Ill. Audiometer. 2,310,588; Feb. 9.
Mages, Morris, assignor to V. Mueller & Company, Chicago, Ill. Signal interrupting means for audiometers. 2,310,589; Feb. 9.
Magnaflux Corporation. (See Ellis, Greer, assignor.))
Mahler, George T. (See Steckel, E. W., and Mahler.)
Malcolm, James V., Jr., et al. (See Longdin, Harry W., assignor.)
Manhart, Frank J., Centralia, Va. Amusement and educational device. 2,310,800; Feb. 9.
Manhattan Shirt Company, The. (See Leeds, Jules C., assignor.)
Mansfield, Albert P. (See Shoults, D. R., and Mansfield.)
Manson, Rose, New York, N. Y. Garment. 2,310,855; Feb. 9.
Marburg, Francis, St. Petersburg, Fla. Supercharged, compression-ignition, internal combustion engine. 2,310,643; Feb. 9.
Marcy, Grosvenor D., Newton Highlands, assignor to Boston Woven Hose & Rubber Company, Cambridge, Mass. Vulcanizing apparatus. 2,310,642; Feb. 9.
Marette, Harvey, University Heights, Ohio. Forming metal shot. 2,310,590; Feb. 9.
Markem Machine Company. (See Meyers, Otto B., assignor.)
Markey, George T., assignor to James Manufacturing Company, Fort Atkinson, Wis. Incubating and hatching tray and cage. 2,310,534; Feb. 9.
Marquis, Joseph A., and A. G. Stephenson, Seattle, Wash. Cheese cutting machine. 2,310,248; Feb. 9.
Marshall, William E., assignor to The American Rolling Mill Company, Middletown, Ohio. Coating metal articles with molten metal and preparing metal articles for hot coating. 2,310,451; Feb. 9.
Martin, George D., Olympia, Wash. Match package. 2,310,535; Feb. 9.
Martin, Glenn L., Company, The. (See Veit, Herman E., assignor.)
Mashon, George A., Los Angeles, Calif., assignor to Garlinghouse Brothers. Expansible chute. 2,310,251; Feb. 9.
Maskey, James J., Dayton, Ohio. Aerodynamic release drag for tow targets. 2,310,249; Feb. 9.
Masllorens, Ramon, Buenos Aires, Argentina. Tuning device for radio receivers. 2,310,303; Feb. 9.
Mason, Francis E., Manchester, assignor to The Yorkshire Dyeing and Proofing Company, Limited, Middleton, England. Shrinking textile fabrics. 2,310,664; Feb. 9.
Massey-Harris Company, The. (See Everett, Charles E., assignor.)
Maul, Michael, Berlin-Johannisthal, Germany; vested in the Alien Property Custodian. Numeral type face. 2,310,856; Feb. 9.
Mayer, Charles M., assignor to The Tappen Stove Company, Mansfield, Ohio. Indicator for cooking stoves. 2,310,900; Feb. 9.
Mayo, Dana H. N., Ridgewood, N. J., and A. E. Raynor, Rockville Centre, N. Y., assignors to The Babcock & Wilcox Company, Newark, N. J. Steam generator. 2,310,801; Feb. 9.

McClanahan, Harry J. (See Carpenter, J. H., Kennedy, and McClanahan.)
McCoy, Claudius T., Philadelphia, and P. M. Craig, Cheltenham, assignors to Philco Radio and Television Corporation, Philadelphia, Pa. Frequency modulation radio receivers. 2,310,304; Feb. 9.
McCullough, Jack A. (See Eitel, W. W., and McCullough.)
McFall, Carey, Company. (See Stuber, W. J., and Di Ienno, assignors.)
McGlincy, Lloyd F., Shaker Heights, Ohio, assignor to The American Steel and Wire Company. Treating steel. 2,310,703; Feb. 9.
McMillan, Frank M., Berkeley, assignor to Shell Development Company, San Francisco, Calif. Catalytic conversion apparatus. 2,310,907; Feb. 9.
McMullen, John C., assignor to The Carborundum Company, Niagara Falls, N. Y. Refractory. 2,310,591; Feb. 9.
McNab, John G. (See Lightbown, I. E., and McNab.)
Meacham, Larned A., Summit, N. J., and C. V. Parker, Washington, D. C., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y. Switching system. 2,310,452; Feb. 9.
Mechanite Metal Corporation. (See Kelly, Herbert W., assignor.)
Melsom, Walter A., Willesden Junction, London, assignor to Bowden (Engineers) Limited, London, England. Coupling. 2,310,250; Feb. 9.
Melsom, Walter A., assignor to Bowden (Engineers) Limited, London, England. Coupling. 2,310,490; Feb. 9.
Melsom, Walter A., Willesden Junction, London, assignor to Bowden (Engineers) Limited, London, England. Connecting hose coupling components. 2,310,536; Feb. 9.
Memovox, Incorporated. (See Rieber, Frank, assignor.)
Menzel, Friedrich, Stuttgart, Germany; vested in the Alien Property Custodian. Electric regulating system. 2,310,857; Feb. 9.
Mercier, Jean, Paris, France; vested in the Alien Property Custodian. Brake mechanism. 2,310,802; Feb. 9.
Merco Centrifugal Company. (See Peltzer, Albert and Albert, Jr., assignors.)
Merritt, George E. (See Briechle, A., Hurley, and Merritt.)
Messner, Maximilian. (See Schantl, E., and Messner.)
Metal Craft Manufacturing Company. (See Enley, John T., assignor.)
Meyer, John W. (See Crew, M. W., and Meyer.)
Meyers, Otto B., Quakertown, Pa., assignor to Markem Machine Company, Keene, N. H. Type wheel for marking machines. 2,310,644; Feb. 9.
Mid-States Gummed Paper Co. (See Humphner, Ferdinand W., assignor.)
Miller, Pharis, Elizabeth, and E. Lieber, Linden, N. J., assignors to Standard Oil Development Company. Purifying lubricants. 2,310,305; Feb. 9.
Miller, Pharis, Elizabeth, N. J., and E. Lieber, West New Brighton, Staten Island, N. Y., assignors to Standard Oil Development Company. Treating Diesel fuels. 2,310,306; Feb. 9.
Miller, Samuel C., New York, N. Y. Adjustable elevation post and insulator construction. 2,310,803; Feb. 9.
Miller, Selby A., Jr. (See Bridges, G. G., and Miller, Jr.)
Miller, William J., Swissvale, Pa. Method and apparatus for the manufacture of pottery ware. 2,310,858; Feb. 9.
Miller, William J., Swissvale, Pa. Manufacture of pottery ware. 2,310,859; Feb. 9.
Minneapolis-Honeywell Regulator Company. (See Haines, J. E., Laing, and Nickells, assignors.)
Minneapolis-Honeywell Regulator Company. (See Joesting, Frederick D., assignor.)
Minneapolis-Honeywell Regulator Company. (See Wilson, John M., assignor.)
Mintz, Edward I., Shaker Heights, Ohio. Thermo model guide and filler. 2,310,912; Feb. 9.
Mishawaka Rubber and Woolen Manufacturing Company. (See Blair, G. W., and Schott, assignors.)
Mishawaka Rubber and Woolen Manufacturing Company. (See Bush, P. L., and Lovell, assignors.)
Mission Manufacturing Company. (See Volpin, Alexander S., assignor.)
Mitchell, Walter G., Oak Park, and A. P. Hultgren, assignors to Sears, Roebuck and Co., Chicago, Ill. Automobile heater. 2,310,453; Feb. 9.
Mochel, Walter E. (See Hanford, W. E., and Mochel.)
Mohun, John L., Chicago, Ill. Heating device. 2,310,645; Feb. 9.
Molow, Henry, Brooklyn, N. Y. Sanitary concealed cup for bottle and can caps. 2,310,491; Feb. 9.
Montgomery, James V. (See Henry, R. W., and Montgomery.)
Montgomery, Kenneth W., Des Moines, Iowa. View finder reflector for cameras. 2,310,307; Feb. 9.
Moomaw, Paul C., Waynesboro, Pa. Telephone support. 2,310,252; Feb. 9.
Moon, John M., Middletown, Ohio, assignor to Signode Steel Strapping Company, Chicago, Ill. Railway car grain door. 2,310,860; Feb. 9.
Morgan, Joseph P., New Castle, Pa. Endless conveyer. 2,310,646; Feb. 9.
Morrison, James, San Francisco, Calif. Apparatus for handling glass tubing. 2,310,537; Feb. 9.
Morrison, Marguerite M., Glencoe, Ill. Massaging device. 2,310,804; Feb. 9.
Morrison Railway Supply Corporation. (See Morrison, Raymond L., assignor.)
Morrison, Raymond L., assignor to Morrison Railway Supply Corporation, Buffalo, N. Y. Alloy. 2,310,308; Feb. 9.
Morse, Guy E., Waterloo, Nebr. Grain grader. 2,310,647; Feb. 9.
Morway, Arnold J. (See Zimmer, J. C., and Morway.)
Moss, Eric B., London, assignor to S. Smith & Sons (Motor Accessories) Limited, Cricklewood, London, England. Electric lighting apparatus. 2,310,743; Feb. 9.
Mott, Aaron A. (See Kryl, Godfried, assignor.)
Mueller Co. (See Bowan, W. J., and Fawley, assignors.)
Mueller, Paul M., assignor to Revere Copper and Brass Incorporated, Rome, N. Y. Mold. 2,310,805; Feb. 9.
Mueller, V., & Company. (See Mages, Morris, assignor.)
Mulert, Theodor. (See Bähring, H., and Mulert.)
Mulholland, Vergil, West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Glass making furnace or tank. 2,310,454; Feb. 9.
Mulholland, Vergil, West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Burner means, especially for glass-making furnaces or tanks. 2,310,704; Feb. 9.
Muller, Arnold. (See Lewis, John O., assignor.)
Müller, Johannes, Berlin, Germany; vested in the Alien Property Custodian. Ultra short wave amplifier circuit. 2,310,455; Feb. 9.
Müller, Richard, and H. Lee, Radebeul, near Dresden, Germany; vested in the Alien Property Custodian. Making electrolyte paste. 2,310,861; Feb. 9.
Mulligan, Patrick J. (See Crane, C. O., and Mulligan.)
Munsingwear, Inc. (See Chatfield, F., and Lindh, assignors.)
Murphy, Harry S., assignor to Coreco, Inc., Buffalo, N. Y. Water heater. 2,310,253; Feb. 9.
Musher Foundation, Incorporated. (See Musher, Sidney, assignor.)
Musher, Sidney, assignor to Musher Foundation, Incorporated, New York, N. Y. Tobacco processing. 2,310,538; Feb. 9.
Nagelvoort, Adriaan, Salt Lake City, Utah. Recovering resins from coal. 2,310,492; Feb. 9.
Nassour, Edward, Los Angeles, Calif. Apparatus for producing animated pictures. 2,310,254; Feb. 9.
National Automotive Fibres, Inc. (See Davies, C. J., and Lind, assignors.)
National Broach & Machine Company. (See Forberg, Albert, assignor.)
National Gypsum Company. (See Crandell, Dean D., assignor.)
National Malleable and Steel Castings Company. (See Zintsmaster, Tim, assignor.)
Nelson, Henry A., De Kalb, Ill. Reverse twist barbwire. 2,310,668; Feb. 9.
Nelson, Raymond S., and A. F. Wintercorn, assignors, by mesne assignments, to The Atwood Vacuum Machine Company, Rockford, Ill. Adjustable grille. 2,310,539; Feb. 9.
Nelson, Russell B. (See Edwards, H., and Nelson.)
Nerlich, Willi, Berlin-Spandau, Germany, assignor to Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa. Explosionproof lamp fitting. 2,310,456; Feb. 9.
Nessler, Friedrich, Walsrode, Germany; vested in the Alien Property Custodian. Washing nitrocellulose to recover nitrating acids. 2,310,862; Feb. 9.
Neuerburg, Walter, Cologne-Marienburg, Germany; vested in the Alien Property Custodian. Reed holder. 2,310,908; Feb. 9.
Newbold, Park L., Cedar Rapids, Iowa. Corn planter. 2,310,540; Feb. 9.
Newbold, Park L., Cedar Rapids, Iowa. Fire escape. 2,310,705; Feb. 9.
New Jersey Zinc Company, The. (See Steckel, E. W., and Mahler, assignors.)
Newport, Jesse H., Jr. (See Berham, P. A., and Newport, Jr.)
New Products Corporation. (See Banker, Oscar H., assignor.)
Niagara Blower Company. (See Deverall, Charles N., assignor.)
Nickells, Stanley W. (See Haines, J. E., Laing, and Nickells.)
Nielsen, Peter P., et al. (See Berkner, Arthur K., assignor.)
Nobel, Bert, Oakland, Calif. Batch charger. 2,310,592; Feb. 9.
Nordberg Manufacturing Co. (See Gruender, Oscar C., assignor.)
Nordberg Manufacturing Co. (See Werner, E., and Steinhart, assignors.)
Norma-Hoffmann Bearing Corporation. (See Batesole, Dwight E., assignor.)
Norrman, Ernst, Delevan, Wis. Apparatus for comparing the rates of regularly recurring impulses. 2,310,706; Feb. 9.
North American Rayon Corporation. See Bley, Rudolph S., assignor.)
Northrup, Homer W. (See Ziegler, N. A., and Northrup.)

Nourse, Ira C., Tulsa, Okla. Producing tetraethyl lead. 2,310,806; Feb. 9.
Oakley, Henry B. (See Thomas, R., and Oakley.)
O'Brien, James J., and J. Strad, Chicago, Ill. Cleaning machine. 2,310,541; Feb. 9.
O'Connell, Maurice M., Buffalo, N. Y. Pipe handling equipment. 2,310,255; Feb. 9.
Oliver Machinery Company. (See Tuthill, H. B., and Caldwell, assignors.)
Orlicki, Stanley E., assignor of one-half to L. E. Rozycki, Los Angeles, Calif. Handrail. 2,310,593; Feb. 9.
Orr, Glenn H., assignor to The General Tire & Rubber Company, Akron, Ohio. Fluid control device. 2,310,309; Feb. 9.
Osborn, Alden E., Mount Vernon, N. Y. Internal combustion engine. 2,310,542; Feb. 9.
Osborn, Alden E., Mount Vernon, N. Y. Pipe joint. 2,310,744; Feb. 9.
Osburn, Jesse L., and W. H. Fain, Houston, Tex. Primer for internal combustion motors. 2,310,594; Feb. 9.
Oserowsky, Harold L., Bay City, Mich. Valve lifter. 2,310,372; Feb. 9.
Oswego Falls Corporation. (See Price, John F., assignor.)
Otis Elevator Company. (See Fritzam, H. E., and Brounn, assignors.)
Otto, Merritt M. (See Cislak, F. E., and Otto.)
Overland, Leo D., Brooklyn, assignor to Joe Lowe Corporation, New York, N. Y. Apparatus for manufacturing frozen confections. 2,310,256; Feb. 9.
Owen, William. (See Schofield, W. W., Owen, and Bidner.)
Owen, William, Pittsburgh, assignor to Pittsburgh Plate Glass Company, Allegheny County, Pa. Manufacture of cellular bodies. 2,310,457; Feb. 9.
Owens-Illinois Glass Company. (See Soubier, Leonard D., assignor.)
Owens-Illinois Pacific Coast Company. (See Watt, Joseph W., assignor.)
Pabst Brewing Company. (See Ehrenfeld, Louis, assignor.)
Pacific Mills. (See Learnard, H. D., Sykes, and Wachter, assignors.)
Packard Motor Car Company. (See Ferguson, James R., assignor.)
Packer, Charles S., assignor to Justrite Manufacturing Company, Chicago, Ill. Self-cleaning switch. 2,310,595; Feb. 9.
Paolantonio, Antonio, Providence, R. I., assignor to Colonial Knife Company, Inc. Knife. 2,310,648; Feb. 9.
Parker, Carlyle V. (See Meacham, L. A., and Parker.)
Parker, Laurie F., Noroton, Conn., and A. Hanger, Richmond, Ky. Target throwing apparatus. 2,310,746; Feb. 9.
Parks, Paul B., Oak Park, and W. R. Peterson, assignors to Vapor Car Heating Company, Inc., Chicago, Ill. Solenoid inlet valve. 2,310,745; Feb. 9.
Patzer, William, and W. A. Tratsch, Chicago, Ill. Coin chute. 2,310,596; Feb. 9.
Payne, John H., Ballston Spa, N. Y., assignor to General Electric Company. Switch testing apparatus. 2,310,747; Feb. 9.
Pearce, George C., assignor to General Motors Corporation, Dayton, Ohio. Domestic appliance. 2,310,543; Feb. 9.
Pearson, Paul W., Chicago, Ill. Process and apparatus for removing coke from stills. 2,310,748; Feb. 9.
Pearson, Valentine, et al. (See Krantz, Edward, assignor.)
Peebles, David D., Berkeley, assignor to Golden State Company, Ltd., San Francisco, Calif. Evaporating apparatus. 2,310,649; Feb. 9.
Peebles, David D., Berkeley, assignor to Golden State Company, Ltd., San Francisco, Calif. Drying apparatus and method. 2,310,650; Feb. 9.
Pegg, Laura M., Detroit, Mich. Surgical bandage. 2,310,864; Feb. 9.
Peltzer, Albert and A., Jr., assignors to Merco Centrifugal Company, San Francisco, Calif. Starch manufacturing process. 2,310,651; Feb. 9.
Peltzer, Albert, Jr. (See Peltzer, Albert and A., Jr.)
Penk, Reinhard. (See Koppelmann, F., Frass, and Penk.)
Perrin, René, Paris, France; vested in the Alien Property Custodian. Effecting metallurgical reactions regularly and rapidly. 2,310,865; Feb. 9.
Peter, Charles, Salt Lake City, Utah. Soil builder. 2,310,652; Feb. 9.
Peterson, Carl D., and E. J. Barth, assignors to Spicer Manufacturing Corporation, Toledo, Ohio. Transmission gearing. 2,310,310; Feb. 9.
Peterson, William J., Solana Beach, Calif. Paper clip. 2,310,458; Feb. 9.
Peterson, William R. (See Parks, P. B., and Peterson.)
Petrie, William K., Angus, Scotland. Diary, notebook, and the like. 2,310,707; Feb. 9.
Petrolite Corporation, Ltd. (See Blair, Charles M., Jr., assignor.)
Petrolite Corporation. (See De Groote, M., and Keiser, assignors.)
Petrovich, Louis, Paris, France; vested in the Alien Property Custodian. Aspirator device for smoke and airing conduits. 2,310,909; Feb. 9.
Philco Corporation. (See Rundell, Theodore W., assignor.)
Philco Radio and Television Corporation. (See McCoy, C. T., and Craig, assignors.)
Philco Radio and Television Corporation. (See Smith, David B., assignor.)
Philipsberg, Henry, Bronx, N. Y. Window sash lock. 2,310,312; Feb. 9.
Phillips, Harold P., assignor to Hastings Manufacturing Company, Hastings, Mich. Piston ring assembly. 2,310,311; Feb. 9.
Phillips Petroleum Company. (See Henry, R. W., and Montgomery, assignors.)
Pitman, Earle C., Red Bank, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Luminescent tube. 2,310,866; Feb. 9.
Pitman, Earle C., Red Bank, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Coating corporation. 2,310,867; Feb. 9.
Pittsburgh Corning Corporation. (See Knudsen, P. E., and Desmone, assignors.)
Pittsburgh Plate Glass Company. (See Dennison, Brook J., assignor.)
Pittsburgh Plate Glass Company. (See Dice, Charles, assignor.)
Pittsburgh Plate Glass Company. (See Haux, Elmer H., assignor.)
Pittsburgh Plate Glass Company. (See Johnson, Melvin W., assignor.)
Pittsburgh Plate Glass Company. (See Knudsen, Percy E., assignor.)
Pittsburgh Plate Glass Company. (See Owen, William, assignor.)
Pivert, Oliver, New Orleans, La. Dispensing device for beverages. 2,310,313; Feb. 9.
Plewes, Argyle C. (See Cox, H. L., and Plewes.)
Pool, William A., Ridgefield Park, N. J. Tire chain. 2,310,807; Feb. 9.
Potter, Raymond M., assignor to Western Filter Co., Denver, Colo. Fluid proportioning device. 2,310,459; Feb. 9.
Pray, Thomas E., assignor to Goodman Manufacturing Company, Chicago, Ill. Kerf-cutting mining machine. 2,310,314; Feb. 9.
Price, John F., assignor to Oswego Falls Corporation, Fulton, N. Y. Machine for applying hood caps. 2,310,868; Feb. 9.
Puchy, Clarence G. (See Coons, C. C., and Puchy.)
Pullman-Standard Car Manufacturing Company. (See Thunstrom, Nils A., assignor.)
Pye, David J., Walnut Creek, Calif., assignor to The Dow Chemical Company, Midland, Mich. Sodium sulphate flotation. 2,310,315; Feb. 9.
Pynn, Leander G. (See Ransom, H. U., and Pynn.)
Racz, Joseph J., Charleston, S. C. Grab. 2,310,869; Feb. 9.
Radio Corporation of America. (See Anderson, E. I., and Barco, assignors.)
Radio Corporation of America. (See Arndt, William F., assignor.)
Radio Corporation of America. (See Artzt, Maurice, assignor.)
Radio Corporation of America. (See Hansell, Clarence W., assignor.)
Radio Corporation of America. (See Hansell, Grant E., assignor.)
Radio Corporation of America. (See Hanson, Oscar B., assignor.)
Radio Corporation of America. (See Katzin, Martin, assignor.)
Radio Corporation of America. (See Lea, Norman, assignor.)
Radio Corporation of America. (See Leverenz, Humboldt W., assignor.)
Radio Corporation of America. (See Lindenbald, Nils E., assignor.)
Radio Corporation of America. (See Rust, N. M., Brailsford, and Goodenough, assignors.)
Radio Corporation of America. (See Schock, Robert E., assignor.)
Radio Corporation of America. (See Swift, Gilbert, assignor.)
Radio Corporation of America. (See Vogel, Charles P., assignor.)
Raggi, Joseph, New York, N. Y. Cutting dies for making leather belt parts. 2,310,808; Feb. 9.
Randolph, Clifford F., Brooklyn, N. Y., assignor to American Machine & Foundry Company. Tobacco supplying means for cigarette machines. 2,310,460; Feb. 9.
Randolph, John H., Great Bend, Kans. Vote counting machine. 2,310,544; Feb. 9.
Ransom, Horace U., and L. G. Pynn, Meredith, N. H. Clamp. 2,310,708; Feb. 9.
Raphael, Harold A., Beliflower, Calif. Carriage type weight indicator. 2,310,597; Feb. 9.
Ratish, Herman D. (See Bullowa, J. G. M., and Ratish.)
Raynor, Arthur E. (See Mayo, D. H. H., and Raynor.)
Rayoid Manufacturing Company Limited. (See Adlington, George S., assignor.)
Raytheon Production Corporation. (See Horn, Clarence A., assignor.)
Reconstruction Finance Corporation. (See Tabb, Warner T., assignor.)

Reed Roller Bit Company. (See Johnson, Charles F., assignor.)
Reed Roller Bit Company. (See Kennedy, Eugene D., assignor.)
Regan, John E., and A. N. Klyver, assignors to Lamson Corporation, Syracuse, N. Y. Vertical conveyer system. 2,310,461; Feb. 9.
Reilly Tar & Chemical Corporation. (See Cislak, F. E., and Otto, assignors.)
Renner, Harold G., Detroit, Mich. Clinch-on nut and manufacture. 2,310,316; Feb. 9.
Reppe, Walter, A. Steinhofer, and G. Daumiller, Ludwigshafen-on-the-Rhine, Germany; vested in the Alien Property Custodian. Preparing diolefins. 2,310,809; Feb. 9.
Ressler, Ralph E., Morristown, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Signaling system. 2,310,749; Feb. 9.
Retterath, Valentin, Iversheim, near Munstereifel, Germany; vested in the Alien Property Custodian. Radial drilling machine. 2,310,870; Feb. 9.
Revere Copper and Brass Incorporated. (See Mueller, Paul M., assignor.)
Reynolds, Jeanne M., Akron, Ohio. Rotary engine. 2,310,653; Feb. 9.
Reynolds Metals Company. (See Whitfield, Marshall G., assignor.)
Reynolds Research Corporation. (See Schmied, Orville K., assignor.)
Rhyne, Homer, et al. (See Dodge, Eugene W., assignor.)
Richard, Grant M., assignor to Toledo Scale Company, Toledo, Ohio. Weighing scale. 2,310,493; Feb. 9.
Richardson Company, The. (See Dillehay, Edward R., assignor.)
Richardson Company, The. (See Shank, McConnell, assignors.)
Ricker, John B., Memphis, Tenn. Delinter. 2,310,598; Feb. 9.
Rieber, Frank, Los Angeles, Calif., assignor to Memovox, Incorporated, Cleveland, Ohio. Sound record carrier. 2,310,545; Feb. 9.
Riehl, John J., Cleveland, Ohio. Type tie-up. 2,310,709; Feb. 9.
Rieper, Claude D., Deepdene, Victoria, Australia. Attachment for milling machines to facilitate precision reproduction or duplication of articles or templates. 2,310,373; Feb. 9.
Ritter, Ludwig, The Hague, Netherlands, assignor to Albi Chemical Corporation, New York, N. Y. Impregnating agent for vegetable fibrous materials. 2,310,257; Feb. 9.
Riveroll, Elfego, Hermosa Beach, Calif. Recovering manganese from ore. 2,310,258; Feb. 9.
Roach, Nathan, assignor to The Cleveland Brass Manufacturing Company, Cleveland, Ohio. Faucet. 2,310,599; Feb. 9.
Roberts, Joseph K., Flossmoor, assignor to Standard Oil Company, Chicago, Ill. Combination coking and catalytic cracking process. 2,310,317; Feb. 9.
Robertshaw Thermostat Company. (See Eskin, Samuel G., assignor.)
Robertson, Alfred C., assignor to Eastman Kodak Company, Rochester, N. Y. Method and apparatus for studying the pollution of atmospheres. 2,310,871; Feb. 9.
Robinson, Claude L., assignor to Consolidated Instruments Corporation, Michigan City, Ind. Velocity measuring device. 2,310,546; Feb. 9.
Robinson, Ray J., Los Angeles, Calif. Illuminated sign. 2,310,600; Feb. 9.
Roesner, Siegmund J., Oak Park, Ill. Printing plate holder. 2,310,547; Feb. 9.
Roethel, John H., Detroit, Mich. Door latch. 2,310,548; Feb. 9.
Roethel, John H., Detroit, Mich. Door latch. 2,310,549; Feb. 9.
Roethel, John H., Detroit, Mich. Door latch. 2,310,550; Feb. 9.
Roko Corporation. (See Wagner, Edmond M., assignor.)
Rolph, Thomas W., Newark, Ohio, assignor to Holophane Company, Inc., New York, N. Y. Luminaire. 2,310,810; Feb. 9.
Rosaire, Esme E. (See Horvitz, Leo, assignor.)
Rosaire, Esme E., Houston, Tex. Geochemical prospecting. 2,310,318; Feb. 9.
Rose, William H., Jersey City, N. J., assignor to Stanco Incorporated. Liquid sprayer. 2,310,319; Feb. 9.
Rosenwald, Robert H., and J. A. Chenicek, Chicago, Ill., assignors to Universal Oil Products Company, Chicago, Ill. Inhibitor for gasoline. 2,310,710; Feb. 9.
Rozycki, Leonard E. (See Orlicki, Stanley E., assignor.)
Rubel, Charles F., assignor to Union Special Machine Company, Chicago, Ill. Sewing machine. 2,310,320; Feb. 9.
Rubissow, George A., New York, N. Y. Throttle actuating device. 2,310,551; Feb. 9.
Rudolph, Charles. (See Semler, L. H., and Rudolph.)
Rummelsburg, Alfred L., assignor to Hercules Powder Company, Wilmington, Del. Polymerization of rosin and rosin esters. 2,310,374; Feb. 9.
Rummelsburg, Alfred L., assignor to Hercules Powder Company, Wilmington, Del. Polymerization of acyclic terpenes in the presence of a phosphoric acid catalyst. 2,310,375; Feb. 9.
Rumpel, Harvey H., assignor to Smith Engineering Works, Milwaukee, Wis. Gyratory crusher. 2,310,601; Feb. 9.
Rundell, Theodore W., Abington, assignor to Philco Corporation, Philadelphia, Pa. Refrigerator. 2,310,872; Feb. 9.
Ruppel, Harry W., assignor to The Foote-Burt Company, Cleveland, Ohio. Stock feed for automatic screw machines. 2,310,259; Feb. 9.
Russell, Francis R. (See Kuhl, P. E., and Russell.)
Russell, Lewis E., Catonsville, Md., assignor to Doughnut Corporation of America, New York, N. Y. Method of and apparatus for making ball doughnuts. 2,310,463; Feb. 9.
Russel, Philip S., assignor to Detroit Lubricator Company, Detroit, Mich. Heating system. 2,310,494; Feb. 9.
Rust, Noel M., Chelmsford, J. D. Brailsford, London, and E. F. Goodenough, Springfield, Chelmsford, England, assignors to Radio Corporation of America. Bandpass amplifier circuits. 2,310,910; Feb. 9.
Rustless Iron and Steel Corporation. (See Arness, William B., assignor.)
S. & S. Corrugated Paper Machinery Co. (See Shields, Albert F., assignor.)
Salmon, Donald B. (See Teeters, Wilbur O., and Salmon.)
Samson United Corporation. (See Keene, Alvin D., assignor.)
Sanborn, Charles E., Stillwater, Okla. Fishing reel. 2,310,654; Feb. 9.
Sandin, Jerome. (See Lindstrom, T., and Sandin.)
Sanford, Roy S., assignor to The Autoyre Company, Incorporated, Oakville, Conn. Carton and tray therefor. 2,310,464; Feb. 9.
Sanford, Roy S., assignor to The Autoyre Company, Incorporated, Oakville, Conn. Carton and tray therefor. 2,310,465; Feb. 9.
Sapp, John P. (See Haren, U. C., and Sapp.)
Saravalli, Herman. (See Garbe, H. W., and H. Saravalli.)
Sargent, Edgar H., and A. G. Alex, Evanston, Ill. Vending machine. 2,310,321; Feb. 9.
Sauer, John C., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Quaternary ammonium compound. 2,310,873; Feb. 9.
Savage, Edward S., Rochester, N. Y. Mystery toy. 2,310,711; Feb. 9.
Schaaf, George, Buffalo, N. Y. Fire extinguishing method and means. 2,310,552; Feb. 9.
Schantl, Erich, and M. Messner, Berlin, Germany; vested in the Alien Property Custodian. Cathode-ray tube. 2,310,811; Feb. 9.
Schick, Friedrich, Berlin-Schoeneberg, Germany; vested in the Alien Property Custodian. Manufacturing oils of high stability. 2,310,812; Feb. 9.
Schiff, Martin, St. Louis County, assignor to Century Electric Company, St. Louis, Mo. Variable speed motor. 2,310,874; Feb. 9.
Schmied, James W. (See Hall, J. A., and Schmied.)
Schmied, Orville K., Upper Montclair, N. J., assignor to Reynolds Research Corporation, Richmond, Va. Asphalt or resin shipping container. 2,310,712; Feb. 9.
Schneider, Phillip C., assignor of one-half to P. B. Joyce, Columbus, Ohio. Process and composition for purification and treatment of natural or sewerage waters. 2,310,655; Feb. 9.
Schnell, Steve, Overland, assignor to Wagner Electric Corporation, St. Louis, Mo. Windshield wiper motor. 2,310,750; Feb. 9.
Schock, Robert E., Riverhead, N. Y., assignor to Radio Corporation of America. Wave length modulation. 2,310,260; Feb. 9.
Schofield, William W., Hubbard, Ohio, W. Owen, Pittsburgh, Pa., and J. Bidner, Youngstown, Ohio. Ingot mold. 2,310,553; Feb. 9.
Schott, John F. (See Blair, G. W., and Schott.)
Schultz, William O., South Milwaukee, and A. G. Steinmayer, Milwaukee, assignors to Line Material Company, South Milwaukee, Wis. Fuse construction. 2,310,466; Feb. 9.
Schwab, Emil P., Pittsburgh, Pa. Antiskid appliance. 2,310,467; Feb. 9.
Schwarzhaupt, Paul J., Scotia, K. A. Killam, and L. A. Taylor, Schenectady, N. Y., assignors to General Electric Company. Pressure responsive device. 2,310,261; Feb. 9.
Scinta, Anthony C., assignor to Trico Products Corporation, Buffalo, N. Y. Windshield wiper. 2,310,751; Feb. 9.
Scovill Manufacturing Company. (See Seyfried, Arthur W., assignor.)
Sears, Roebuck and Co. (See Horsrud, Ole, assignor.)
Sears, Roebuck and Co. (See Mitchell, W. G., and Hultgren, assignors.)
Seeger, Edwin W. (See Kuhn, C. W., and Seeger.)
Seger, Francis M. (See Badertscher, D. E., Crandall, and Seger.)
Segol, Emile A. M. A. (See Canac, L. H. F., and Segol.)
Sellmeyer, Gilbert J., Indianapolis, Ind. Work guide for saw tables. 2,310,813; Feb. 9.
Semler, Loren H., and C. Rudolph, Chicago, Ill. Lawn rake. 2,310,322; Feb. 9.

Seyfried, Arthur W., Racine, Wis., assignor to Scovill Manufacturing Company, Waterbury, Conn. Suction nozzle. 2,310,554; Feb. 9.
Shank, McConnell, Oak Park, Ill., assignor to The Richardson Company, Lockland, Ohio. Cell cover with electrolyte control. 2,310,656; Feb. 9.
Sharp, James W., Chicago, Ill. Antenna coupling and tuning system for communication or broadcast receivers. 2,310,323; Feb. 9.
Shell Development Company. (See Cattaneo, Alfred G., assignor.)
Shell Development Company. (See Groll, H. P. A., Hearne, and von Stietz, assignors.)
Shell Development Company. (See McMillan, Frank M., assignor.)
Shields, Albert F., Jamaica, assignor to S. & S. Corrugated Paper Machinery Co., Inc., Brooklyn, N. Y. Pressure roll adjustment. 2,310,262; Feb. 9.
Shively, John J., New York, N. Y. Multiple temperature refrigerating apparatus. 2,310,657; Feb. 9.
Short, Frank, Canton Center, Conn., assignor to Flakice Corporation. Ice making apparatus and method. 2,310,468; Feb. 9.
Shoults, David R., and A. P. Mansfield, Schenectady, N. Y., assignors to General Electric Company. Control system. 2,310,713; Feb. 9.
Siedle, Arnold D., Canton, assignor to The Hoover Company, North Canton, Ohio. Refrigeration. 2,310,875; Feb. 9.
Signal Engineering & Manufacturing Company. (See Terjesen, Tellef A., assignor.)
Signode Steel Strapping Company. (See Moon, John M., assignor.)
Sillman, Ilon M. (See Sillman, William A. and Ilon M.)
Sillman, William A., and I. M. Sillman, New York, N. Y. Palette. 2,310,752; Feb. 9.
Silver, Walter H., assignor to Deere & Company, Moline, Ill. Lister. 2,310,602; Feb. 9.
Simon, I. A. (See Briggs, Merton B., assignor.)
Slaughter, George H., Benton Harbor, Mich. Gooseneck for containers. 2,310,714; Feb. 9.
Small, Gertrude U. (See Strite, L., and Small.)
Smidth, F. L., & Co. (See Svendsen, Ejnar, assignor.)
Smith, David B., assignor to Philco Radio and Television Corporation, Philadelphia, Pa. Modulating system. 2,310,324; Feb. 9.
Smith Engineering Works. (See Rumpel, Harvey H., assignor.)
Smith, John E., Plainfield, N. J. Electrical heating unit. 2,310,325; Feb. 9.
Smith, Ray L. (See Klipsch, Paul W., assignor.)
Smith, S., & Sons (Motor Accessories) Limited. (See Moss, Eric B., assignor.)
Smith, Walter, H., Wilkinsburg, assignor to Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa. Regulating apparatus. 2,310,876; Feb. 9.
Smyers, William H., Westfield, and T. Cross, Jr., Elizabeth, N. J., assignors to Standard Oil Development Company. Motor fuel. 2310,376; Feb. 9.
Snyder, Harold H., Mount Lebanon, assignor to Forter-Teichmann Company, Pittsburgh, Pa. Severing lengths of glassware. 2,310,469; Feb. 9.
Societe "Alliages Autoproteges." (See Canac, L. H. F., and Segol, assignors.)
Socony-Vacuum Oil Company. (See Badertscher, D. E., Crandall, and Seger, assignors.)
Socony-Vacuum Oil Company. (See Carpenter, J. H., Kennedy, and McClanahan, assignors.)
Soldner, Georg, Nuremberg, Germany, assignor to Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa. Ventilation of dynamoelectric machines. 2,310,470; Feb. 9.
Soubier, Leonard D., Toledo, Ohio, assignor to Owens-Illinois Glass Company. Method of and apparatus for feeding glass. 2,310,715; Feb. 9.
Spencer Lens Company. (See Bennett, A. H., and Esty, assignors.)
Spencer Lens Company. (See Estey, Roger S., assignor.)
Spencer Lens Company. (See Estey, R. S., and Harper, assignors.)
Sperry, Pierce, Middlefield, Ohio. Outlet connector for tanks. 2,310,877; Feb. 9.
Spicer Manufacturing Corporation. (See Peterson, C. D., and Barth, assignors.)
Square D Company. (See Clark, George H., assignor.)
Stahly, Grant L., Columbus, assignor to The Commonwealth Engineering Company of Ohio, Dayton, Ohio. Making dextran. 2,310,263; Feb. 9.
Stanco Incorporated. (See Rose, William H., assignor.)
Standard Catalytic Company. (See Connolly, Gerald C., assignor.)
Standard Oil Company. (See Roberts, Joseph K., assignor.)
Standard Oil Company. (See Voorhees, Vanderveer, assignor.)
Standard Oil Development Company. (See Gilliland, Edwin R., assignor.)
Standard Oil Development Company. (See Kuhl, P. E., and Russell, assignors.)
Standard Oil Development Company. (See Miller, P., and Lieber, assignors.)
Standard Oil Development Company. (See Smyers, W. H., and Cross, Jr., assignors.)
Standard Oil Development Company. (See Sweeney, William J., assignor.)
Standard Oil Development Company. (See Zimmer, J. C., and Morway, assignors.)
Standard Stoker Company, The. (See Surdy, Charles J., assignor.)
Standard Tool and Manufacturing Co. (See Franke, August J., assignor.)
Stanley, Julian C., et al. (See Longdin, Harry W., assignor.)
Steckel, Ernest W., Slatington, and G. T. Mahler, Palmerton, Pa., assignors to The New Jersey Zinc Company, New York, N. Y. Recovery of volatile metals. 2,310,471; Feb. 9.
Steele, James W., North Kansas City, Mo. Garment finishing and folding apparatus. 2,310,555; Feb. 9.
Stein, Hall & Company. (See Kupfer, Otto L., assignor.)
Stein, Hall & Company. (See La Piana, F. G., and Bosland, assignors.)
Steinhart, Karl. (See Werner, E., and Steinhart.)
Steinhofer, Adolf. (See Reppe, W., Steinhofer, and Daumiller.)
Steinmayer, Alwin G. (See Schultz, W. O., and Steinmayer.)
Stephan, Hallis N., Cleveland Heights, assignor, by mesne assignments, to The Lucas Machine Tool Company, Bratenahl, Ohio. Machine tool. 2,310,878; Feb. 9.
Stephenson, Albert G. (See Marquis, J. A., and Stephenson.)
Stephenson, James E., assignor to General Railway Signal Company, Rochester, N. Y. Highway crossing gate. 2,310,716; Feb. 9.
Storkline Furniture Corporation. (See Feldman, Abraham G., assignor.)
Stout, Charles R., assignor to C. E. Butler, Waterloo, Iowa. Portable motor driven cream separator. 2,310,814; Feb. 9.
Strad, James. (See O'Brien, J. J., and Strad.)
Straubel, Clarence W., assignor to The General Fireproofing Company, Youngstown, Ohio. Erection means for filing material support. 2,310,264; Feb. 9.
Straubel, Clarence W., assignor to The General Fireproofing Company, Youngstown, Ohio. Drawer with tilting back wall. 2,310,879; Feb. 9.
Strite, Lucile, and G. U. Small, Washington, D. C. Urinal. 2,310,658; Feb. 9.
Strobel, Howard M., Allegany, N. Y. Acceleration high frequency generator. 2,310,815; Feb. 9.
Strong, George F., Grosse Pointe Farms, Mich. Electric welding machine. 2,310,556; Feb. 9.
Strong, George F., Grosse Pointe Farms, Mich. Electric seam welding machine. 2,310,557; Feb. 9.
Stryker, Elmer W. (See Christian, Henry C., assignor.)
Stuber, Walter J., and J. J. Di Ienno, assignors to Carey McFall Company, Philadelphia, Pa. Worm. 2,310,880; Feb. 9.
Sugar Beet Products Company. (See Conner, Michael, assignor.)
Sullivan, Alan P., Elizabeth, N. J., assignor to Cities Service Oil Company, New York, N. Y. Gas analyzer. 2,310,472; Feb. 9.
Sulzer Frères Société Anonyme. (See Waeber, Erwin, assignor.)
Summerhayes, Harry R., Schenectady, N. Y., assignor to General Electric Company. Protective system. 2,310,753; Feb. 9.
Summersgill, James F., Manheim Township, Lancaster County, assignor to Armstrong Cork Company, Lancaster, Pa. Making variegated hard surface coverings. 2,310,495; Feb. 9.
Sun Tube Corporation, The. (See Fridén, John H., assignor.)
Sundstrand, Oscar J., West Hartford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 2,310,717; Feb. 9.
Surdy, Charles J., Erie, Pa., assignor to The Standard Stoker Company, Incorporated. Stoker fired locomotive. 2,310,496; Feb. 9.
Sutterfield, Noel H. (See Wilson, J. A., and Sutterfield.)
Svendsen, Ejnar, Cranford, N. J., assignor to F. L. Smidth & Co., New York, N. Y. Thrust mechanism. 2,310,473; Feb. 9.
Swanson, Levi G., Perry, Iowa. Dressing poultry. 2,310,881; Feb. 9.
Swartwout, Robert L., assignor to Union Steel Products Company, Albion, Mich. Structural unit. 2,310,326; Feb. 9.
Sweeney, William J., Elizabeth, N. J., assignor to Standard Oil Development Company. Production of motor fuel. 2,310,327; Feb. 9.
Sweeny, Robert P., Atlanta, Ga. Pneumatic conveying apparatus. 2,310,265; Feb. 9.
Swift, Gilbert, Philadelphia, Pa., assignor to Radio Corporation of America. Square wave generator. 2,310,328; Feb. 9.
Sykes, Norman A. (See Learnard, H. D., Sykes, and Wachter.)
Szulist, Stephen. (See Labin, F. R., and Szulist.)
Tabb, Warner T., Brooklyn, assignor, by mesne assignments to Reconstruction Finance Corporation, New York, N. Y. Valve mechanism. 2,310,913; Feb. 9.

Tack, Carl E., and W. A. Helsten, assignors to American Steel Foundries, Chicago, Ill. Rotor brake. 2,310,266; Feb. 9.
Tappen Stove Company, The. (See Mayer, Charles M., assignor.)
Taylor, August M., Fort Collins, Colo. Water motor. 2,310,816; Feb. 9.
Taylor, August M., Fort Collins, Colo. Reflecting optical unit. 2,310,817; Feb. 9.
Taylor, Charles H., Springfield, Mass., assignor to Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa. Suction cleaner apparatus. 2,310,267; Feb. 9.
Taylor, Charles H., Springfield, Mass., assignor to Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa. Suction cleaning apparatus. 2,310,268; Feb. 9.
Taylor, Edward S., Cambridge, Mass., assignor to Wright Aeronautical Corporation. Resilient engine mount. 2,310,882; Feb. 9.
Taylor Instrument Companies. (See Widmer, Jules A., assignor.)
Taylor, Laurens A. (See Schwarzhaupt, P. J., Killam, and Taylor.)
Taylor, Taylor & Hobson Limited. (See Warmisham, Arthur, assignor.)
Taylor, William H., Waukesha County, assignor to The Vilter Manufacturing Company, Milwaukee, Wis. Sand cooler. 2,310,603; Feb. 9.
Teach, Max K., assignor to The Columbus Show Case Company, Columbus, Ohio. Display case. 2,310,718; Feb. 9.
Tecalemit, Limited. (See Langley, Thomas W., assignor.)
Teeters, Wilbur O., Cheskill, N. J., and D. B. Salmon, assignors to Hoke Incorporated, New York, N. Y. Valve. 2,310,558; Feb. 9.
Teichmann, Henry F., Washington, Pa., assignor to Forter-Teichmann Company. Manufacture of glass tubing. 2,310,474; Feb. 9.
Terjesen, Tellef A., Hoboken, N. J., assignor to Signal Engineering & Manufacturing Company, New York, N. Y. Adjustable spring loading device for relay armatures. 2,310,754; Feb. 9.
Thatcher, Frederick M., Clairton, J. H. Wells, and P. J. Wilson, Jr., Pittsburgh, Pa., said Wells and said Wilson assignors to Carnegie-Illinois Steel Corporation. Recovery of low-boiling organic compounds rfom coke oven by-products. 2,310,659; Feb. 9.
Thöm, Kurt, Berlin-Liechterfelde, Germany; vested in the Alien Property Custodian. Circuit arrangement with secondary emission electron multipliers. 2,310,883; Feb. 9.
Thomas, Richard, and H. B. Oakley Bromborough, England, assignors to Lever Brothers Company. Soap. 2,310,475; Feb. 9.
Thumim, Carl, Yeadon, Pa., assignor to General Electric Company. Electric circuit breaker. 2,310,755; Feb. 9.
Thunstrom, Nils A., assignor to Pullman-Standard Car Manufacturing Company, Chicago, Ill. Railway car. 2,310,497; Feb. 9.
Timken-Detroit Axle Company, The. (See Wilson, J. A., and Sutterfield, assignors.)
Tinnerman, George A., assignor to Tinnerman Products, Inc., Cleveland, Ohio. Fastening means. 2,310,756; Feb. 9.
Tinnerman Products, Inc. (See Tinnerman, George A., assignor.)
Titanium Alloy Manufacturing Company, The. (See Kinzie, Charles J., assignor.)
Todd, Edwin T., assignor to American Seating Company, Grand Rapids, Mich. Chair. 2,310,476; Feb. 9.
Toledo Scale Company. (See Richard, Grant M., assignor.)
Tompkins, Harold D., Summit, N. J. Container. 2,310,818; Feb. 9.
Torstenson, Henry A., et al. (See Krantz, Edward, assignor.)
Towle, Raymond W., Sr. (See Lones, F. H., and Towle, Sr.)
Tratsch, Walter A. (See Patzer, W., and Tratsch.)
Trevaskis, Henry, Hampton Lane, Solihull, assignor to Dunlop Rubber Company, Limited, London County, England. Chute for ammunition and other articles 2,310,884; Feb. 9.
Trico Products Corporation. (See Scinta, Anthony C., assignor.)
Tubize Chatillon Corporation. (See Denyes, Russell O., assignor.)
Tull, Robert H., Springfield, Mass., assignor to Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa. Refrigeration apparatus. 2,310,477; Feb. 9.
Turton, Robert S., Huntington Park, assignor to Douglas Aircraft Company, Inc., Santa Monica, Calif. Forming machine. 2,310,498; Feb. 9.
Tuthill, Howard B., and H. F. Caldwell, assignors, by mesne assignments, to Oliver Machinery Company, Grand Rapids, Mich. Wrapping machine. 2,310,719; Feb. 9.
Tyerman, William, Norton-on-Tees, England, assignor to Imperial Chemical Industries Limited. Treatment of methylamines. 2,310,478; Feb. 9.
Tyler, Warren C., Phoenix, Ariz. Flexible coupling. 2,310,329; Feb. 9.
Ulrich, Frederick, assignor to Conmar Products Corporation, Bayonne, N. J. Machine and method for making slide fasteners. 2,310,660; Feb. 9.
Underwood Elliott Fisher Company. (See Sundstrand, Oscar J., assignor.)
Union Special Machine Company. (See Rubel, Charles F., assignor.)
Union Steel Products Company. (See Swartwout, Robert L., assignor.)
United Engineers & Constructors, Inc. (See Haug, John S., assignor.)
United Shoe Machinery Corporation. (See Bell, Charles C., assignor.)
United Shoe Machinery Corporation. (See Brostrom, Charles G., assignor.)
United Shoe Machinery Corporation. (See Leveque, Bernard T., assignor.)
United States Rubber Company. (See Brooks, A. E., and Bender, assignors.)
United States Rubber Company. (See Crane, C. O., and Mulligan, assignors.)
Universal Oil Products Company. (See Rosenwald, R. H., and Chenicek, assignors.)
Vanderhoff, Russell E. (See Weber, M. J., and Vanderhoff.)
Van Horn, Arthur H., Rocky River, assignor to Cornell Securities Corporation, Cleveland, Ohio. Closing ring. 2,310,901; Feb. 9.
Van Orden, Paul W., Cuyahoga Falls, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Conveyer belt. 2,310,819; Feb. 9.
Vapor Car Heating Company. (See Parks, P. B., and Peterson, assignors.)
Vaughan, Andrew E. and A. E., Jr., assignors to The Vaughan Knitting Company, Pottstown, Pa. Hosiery shaping device. 2,310,330; Feb. 9.
Vaughan, Andrew E., Jr. (See Vaughan, Andrew E. and Andrew E., Jr.)
Vaughan Knitting Company, The. (See Vaughan, Andrew E. and Andrew E., Jr.)
Veeneman, William H., assignor to Frankfort Distilleries, Incorporated, Louisville, Ky. Double bead barrel head. 2,310,885; Feb. 9.
Veit, Herman E., Parkville, assignor to The Glenn L. Martin Company, Baltimore, Md. Sorting machine. 2,310,661; Feb. 9.
Victor Metal Products Corporation. (See Derham, P. A., and Newport, Jr., assignors.)
Vilter Manufacturing Company, The. (See Taylor, William H., assignor.)
Vineberg, Joseph H., Ottawa, Ontario, Canada. Garment carrying folder. 2,310,499; Feb. 9.
Voelkel, John F., Brooklyn, N. Y., assignor, by mesne assignments, to M. A. B. Frohlich. Check valve for door closers. 2,310,902; Feb. 9.
Vogel, Charles P., Millburn, N. J., assignor to Radio Corporation of America. Electrode spacer. 2,310,662; Feb. 9.
Vollmer, Hermann, New York, N. Y. Vitamin preparation for parenteral administration. 2,310,479; Feb. 9.
Volpin, Alexander S., assignor to Mission Manufacturing Company, Houston, Tex. Lubrication feed for valves. 2,310,480; Feb. 9.
Von Stietz, George E. G. (See Groll, H. P. A., Hearne, and von Stietz.)
Voorhees, Vanderveer, Homewood, assignor to Standard Oil Company, Chicago, Ill. System for handling abrasive powder. 2,310,377; Feb. 9.
Wachter, Arthur R. (See Learnard, H. D., Sykes, and Wachter.)
Waeber, Erwin, assignor to Sulzer Frères, Société Anonyme, Winterthur, Switzerland. Internal combustion engine plant with at least two crankshafts. 2,310,269; Feb. 9.
Wagner, Edmond M., Southgate, Calif., assignor to Roko Corporation, Reno, Nev. Preventing pitting of well pumps. 2,310,757; Feb. 9.
Wagner Electric Corporation. (See Farry, Otis T., assignor.)
Wagner Electric Corporation. (See Schnell, Steve, assignor.)
Wahl Clipper Corporation. (See Wahl, Leo J., assignor.)
Wahl, Leo J., assignor to Wahl Clipper Corporation, Sterling, Ill. Lather machine. 2,310,378; Feb. 9.
Wahl, Leo J., assignor to Wahl Clipper Corporation, Sterling, Ill. Lather making apparatus. 2,310,379; Feb. 9.
Waldvogel, Paul, assignor to Aktiengesellschaft Brown, Boveri & Cie, Baden, Switzerland. Device for reducing eddy current losses in stator end plates. 2,310,501; Feb. 9.
Walker, Cranford P., San Marino, Calif. Vibration translating means. 2,310,559; Feb. 9.
Walker, Richard A., St. Joseph, Mo. Ventilator. 2,310,331; Feb. 9.
Wallace, Bert A., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Two-way trunk circuit. 2,310,481; Feb. 9.
Walters, Ernest G., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Magnetic core. 2,310,820; Feb. 9.

Wandrey, Clarence W., Chicago, Ill., assignor to Zenith Radio Corporation. Antenna coupling and tuning system for communication or broadcast receivers. 2,310,720; Feb. 9.
Ward, Ashley F. (See Heller, William F., assignor.)
Warmisham, Arthur, assignor to Taylor, Taylor & Hobson Limited, Leicester, England. Optical objective. 2,310,502; Feb. 9.
Warner Brothers Pictures, Inc. (See Arndt, William F., assignor.)
Waterbury Farrel Foundry and Machine Company, The. (See Wilcox, Richard L., assignor.)
Watson, James A., Jr. (See Galanot, C. P., and Watson, Jr.)
Watson, Thomas J., assignor to International Business Machines Corporation, New York, N. Y. Display device for typewriters. 2,310,482; Feb. 9.
Watt, Joseph W., Oakland, Calif., assignor to Owens-Illinois Pacific Coast Company. Glassware forming machine. 2,310,721; Feb. 9.
Watts, Arthur P. (See Fessler, A. H., and Watts.)
Weber, Mathias J., and R. E. Vanderhoff, assignors to Continental Scale Corporation, Chicago, Ill. Weighing scale. 2,310,560; Feb. 9.
Weinger, Irving. (See Widder, S., and Weinger.)
Weinger, Irving, assignor to J. Widder & Co., New York, N. Y. Photograph album. 2,310,722; Feb. 9.
Weinrich, William W., Oakmont, and E. J. Loew, Lansdowne, assignors to Gulf Research & Development Company, Pittsburgh, Pa. Production of alkylated phenols. 2,310,663; Feb. 9.
Weis, John A. (See Burleigh, J. K., and Weis.)
Welch, William W. (See Fukal, Alfred F., assignor.)
Wells, Joseph H. (See Thatcher, F. M., Wells, and Wilson, Jr.)
Wendell, Jane E. M. (See Davitt, M. M. M., and Wendell.)
Wentworth, Chauncey F., et al. (See Dodge, Eugene W., assignor.)
Wentz, Edward C., Sharpsville, assignor to Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa. Welding transformer. 2,310,886; Feb. 9.
Werner, Ewald, and K. Steinhart, assignors to Nordberg Manufacturing Co., Milwaukee, Wis. Impact member for impact crushers. 2,310,758; Feb. 9.
West Virginia Pulp and Paper Company. (See Haywood, Gerald, assignor.)
Western Electric Company. (See Edelman, Beril, assignor.)
Western Electric Company. (See Garbe, H. W., and Saravalli, assignors.)
Western Electric Company. (See Walters, Ernest G., assignor.)
Western Electric Company. (See Wolfson, Henry M., assignor.)
Western Filter Company. (See Potter, Raymond M., assignor.)
Western Machinery Company. (See Bousman, Samuel I., assignor.)
Westinghouse Electric & Manufacturing Company. (See Bostwick, Myron A., assignor.)
Westinghouse Electric & Manufacturing Company. (See Ditzlar, John L., assignor.)
Westinghouse Electric & Manufacturing Company. (See Flanders, Warren B., assignor.)
Westinghouse Electric & Manufacturing Company. (See Hall, E. H., and Leitzel, assignors.)
Westinghouse Electric & Manufacturing Company. (See Hildebrand, Ralph L., assignor.)
Westinghouse Electric & Manufacturing Company. (See Jernstedt, George W., assignor.)
Westinghouse Electric & Manufacturing Company. (See Kriebel, Ernst, assignor.)
Westinghouse Electric & Manufacturing Company. (See Lindstrom, T., and Sandin, assignors.)
Westinghouse Electric & Manufacturing Company. (See Nerlich, Willi, assignor.)
Westinghouse Electric & Manufacturing Company. (See Smith, Walter H., assignor.)
Westinghouse Electric & Manufacturing Company. (See Soldner, Georg, assignor.)
Westinghouse Electric & Manufacturing Company. (See Taylor, Charles H., assignor.)
Westinghouse Electric & Manufacturing Company. (See Tull, Robert H., assignor.)
Westinghouse Electric & Manufacturing Company. (See Wentz, Edward C., assignor.)
Wheeler, Carson M., Montclair, N. J., assignor to Federal Telephone and Radio Corporation. Grid construction. 2,310,822; Feb. 9.
Wheeler, John N. (See Dunwell, S. W., and Wheeler.)
Whitchurch, Ellwood F., assignor to The Griffith Laboratories, Inc., Chicago, Ill. Electrical cooker. 2,310,723; Feb. 9.
Whitfield, Marshall G., Knoxville, Tenn., assignor to Reynolds Metals Company, New York, N. Y. Anode. 2,310,561; Feb. 9.
Whitlow, John B., Cincinnati, Ohio. Automatic transmission. 2,310,724; Feb. 9.
Whittington, James A., Evanston, Ill. Control device. 2,310,562; Feb. 9.
Wickersham, Newton W., Whitter, Calif., assignor, by mesne assignments, to Halliburton Oil Well Cementing Company. Well cementing apparatus. 2,310,483; Feb. 9.
Widder, J., & Co. (See Weinger, Irving, assignor.)
Widder, J., & Co. (See Widder, S., and Weinger, assignors.)
Widder, Samuel, and I. Weinger, assignors to J. Widder & Co., New York, N. Y. Index directory. 2,310,725; Feb. 9.
Widmer, Jules A., assignor to Taylor Instrument Companies, Rochester, N. Y. Damping and cushioning arrangement for measuring instruments. 2,310,503; Feb. 9.
Wikarski, Stefan, Warsaw, Poland; vested in the Alien Property Custodian. Apparatus for effecting smokeless combustion. 2,310,903; Feb. 9.
Wilbanks, Early A., Buford, Ga. Multiple check. 2,310,332; Feb. 9.
Wilckens, Eibe A. (See Goebel, G., and Wilckens.)
Wilcox-Gay Corporation. (See Gay, Paul S., assignor.)
Wilcox, Richard L., assignor to The Waterbury Farrel Foundry and Machine Company, Waterbury, Conn. Feed stop. 2,310,823; Feb. 9.
Wildhaber, Ernest, Brighton, assignor to Gleason Works, Rochester, N. Y. Producing gears. 2,310,484; Feb. 9.
Wilke, William P., III., Sparrows Point, and De M. M. Erskine, Dundalk, Md., assignors to Bethlehem Steel Company. Lubricating cold reducing mills. 2,310,563; Feb. 9.
Williams Furniture Corporation. (See Hubbard, Elbert B., assignor.)
Williams, Harold W., Scarsdale, assignor to Lumelite Corporation, New York, N. Y. Sign. 2,310,665; Feb. 9.
Wilson, John A., and N. H. Sutterfield, assignors to The Timken-Detroit Axle Company, Detroit, Mich. Liquid fuel burning apparatus. 2,310,333; Feb. 9.
Wilson, John M., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Relay. 2,310,334; Feb. 9.
Wilson, Philip J., Jr. (See Thatcher, F. M., Wells, and Wilson, Jr.)
Wimbish, Raymond L., Roanoke, Va. Chassis frame suspension. 2,310,821; Feb. 9.
Wintercorn, Andrew F. (See Nelson, R. S., and Wintercorn.)
Wise, Charles H. (See Campbell, V. D., and Wise.)
Wolfson, Henry M., assignor to Western Electric Company, Incorporated, New York, N. Y. Electrical apparatus. 2,310,335; Feb. 9.
Woods, Robert M., Wheeling, W. Va. Boat. 2,310,380; Feb. 9.
Worthington Mower Company. (See Blair, John I., assignor.)
Worthington Mower Company. (See Blair, J. I., and Imbt, assignors.)
Wright Aeronautical Corporation. (See Taylor, Edward S., assignor.)
Wyant, Fred E., Anderson, Ind. Orthopedic appliance. 2,310,824; Feb. 9.
Wyckoff, Amos A., assignor to B. L. Youney, Oakland, Calif. Faucet. 2,310,485; Feb. 9.
Yauney, Bernice L. (See Wyckoff, Amos A., assignor.)
Yorkshire Dyeing and Proofing Company, The. (See Mason, Francis E., assignor.)
Younghusband, James L., Chicago, Ill. Lipstick device. 2,310,726; Feb. 9.
Younkins, Earl L., South Nyack, N. Y. Pessary. 2,310,564; Feb. 9.
Zavertnik, Joseph, Englewood, N. J., assignor, by mesne assignments, to Allied Chemical & Dye Corporation. Fractional distillation of tar. 2,310,500; Feb. 9.
Zenith Radio Corporation. (See Gustafson, Gilbert E., assignor.)
Zenith Radio Corporation. (See Wandrey, Clarence W., assignor.)
Zerweck, Herman, Groose Pointe, Mich. (Tank. 2,310,270; Feb. 9.
Ziegler, Nicholas A., and H. W. Northrup, assignors to Crane Co., Chicago, Ill. Malleable cast iron. 2,310,666; Feb. 9.
Ziegler, Nicholas A., and H. W. Northrup, assignors to Crane Co., Chicago, Ill. Malleable cast iron. 2,310,667; Feb. 9.
Ziehmer, George P., Jr., assignor to American Can Company, New York, N. Y. Container. 2,310,271; Feb. 9.
Zimmer, John C., Hillside, and A. J. Morway, Roselle, N. J., assignors to Standard Oil Development Company. Treatment of ferrous bearing metals. 2,310,381; Feb. 9.
Zindrick, Edward J., Chicago, Ill. Wood cutting machine. 2,310,604; Feb. 9.
Zintsmaster, Tim, Cleveland Heights, assignor to National Malleable and Steel Castings Company, Cleveland, Ohio. Resilient car wheel. 2,310,486; Feb. 9.
Zwaska, John M., Auburndale, Wis. Plow point. 2,310,336; Feb. 9.

LIST OF REISSUE INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 9TH DAY OF FEBRUARY, 1943

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice).

Conveyer, Shaker. L. F. Crawford. Re. 22,263; Feb. 9.
Secondary and tertiary 3-amino-methyl-polyhydroxy-phthalides. W. S. Loewe. Re. 22,264; Feb. 9.
Transmission synchronizer S. O. White. Re. 22,265; Feb. 9.

LIST OF DESIGN INVENTIONS

Atomizer. H. E. Bartram. 134,988; Feb. 9.
Badge or similar article. R. Zlatohlavek. 134,987; Feb. 9.
Barometer. S. L. Gerson. 134,990–1; Feb. 9.
Billboard. M. G. Peters. 134,992; Feb. 9.
Brooch or similar article. A. Katz. 134,982–4; Feb. 9.
Brooch, Separable. A. Katz. 134,981; Feb. 9.
Combine. C. E. Everett. 135,008; Feb. 9.
Cover for Bibles. J. Galter. 134,998; Feb. 9.
Desk. C. I. Center and W. E. Tarr. 135,007; Feb. 9.
Dish, Combination dessert and cake. R. Sullivan. 135,003; Feb. 9.
Dispenser, Milk. L. F. Norris. 135,000; Feb. 9.
Dress. M. Berger. 135,013; Feb. 9.
Dress. A. Caron. 135,014; Feb. 9.
Dress. N. D. Carson. 135,015–16; Feb. 9.
Dress. A. Gershuny. 135,018; Feb. 9.
Dress. D. E. Gottlieb. 135,019–20; Feb. 9.
Dress. D. Seligman. 135,023; Feb. 9.
Electric switch housing. N. C. Fetter. 134,994; Feb. 9.
Electric switch housing. O. H. Kaminky. 134,996; Feb. 9.
Fabric, Embroidered. J. Bernstein. 134,989; Feb. 9.
Fabric, Textile. E. Raphaels. 135,002; Feb. 9.
Flatiron and lamp housing, Combined. H. D. McKinney. 135,022; Feb. 9.
Glider and cradle, Combined. E. W. Worley. 134,979; Feb. 9.
Hanger, Garment. T. W. Benner. 134,980; Feb. 9.
Hat. Z. Harpignies. 135,009–11; Feb. 9.
Lace, Embroidered. P. Wiener. 135,004; Feb. 9.
Medallion. E. K. Madan. 134,985; Feb. 9.
Negligee. V. Giovagnoni. 135,021; Feb. 9.
Paving machine, Portable. V. F. Baumgardner. 135,005; Feb. 9.
Pin, Jewelry. M. C. Meyer. 134,977; Feb. 9.
Pin or similar article. S. Favari. 134,975; Feb. 9.
Scarf or similar article. E. Herzfeld. 134,999; Feb. 9.
Slip. M. Brown. 135,006; Feb. 9.
Spectacle frame or similar article. I. Fishberger. 134,976; Feb. 9.
Stand, Flag. C. A. Gearing. 134,995; Feb. 9.
Stand, Purveying. C. Coil. 135,017; Feb. 9.
Support and display unit, Cross. R. F. Brennan. 134,993; Feb. 9.
Table. C. E. Waltman. 134,978; Feb. 9.
Tablecloth, Lace. F. G. Hobden. 135,012; Feb. 9.
Toilet seat hinge. W. D. Schultz. 134,986; Feb. 9.
Tray, Ash. C. T. Sloan. 134,997; Feb. 9.
Vacuum cleaner casing. M. S. Park. 135,001; Feb. 9.

LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 9TH DAY OF FEBRUARY, 1943

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice).

Abrasive powder, System for handling. V. Vorhees. 2,310,377; Feb. 9.
Acceleration high frequency generator. H. M. Strobel. 2,310,815; Feb. 9.
Accelerometer, Angular classifying. J. A. Buchanan. 2,310,213; Feb. 9.
Acid derivatives, Ricinoleic. T. F. Carruthers. 2,310,395; Feb. 9.
Adhesive tape. J. B. Leavy. 2,310,740; Feb. 9.
Adjustable display stand. L. E. Johnson. 2,310,439; Feb. 9.
Adjustable rack. L. W. Evans. 2,310,770; Feb. 9.
Aerodynamic release drag for tow targets. J. J. Maskey. 2,310,249; Feb. 9.
Air and gas washer. E. F. Fisher. 2,310,411; Feb. 9.
Air cleaner. H. G. Kamrath. 2,310,528; Feb. 9.
Air cleaner and silencer assembly. B. G. Brown. 2,310,510; Feb. 9.
Air conditioner, Unit. C. N. Deverall. 2,310,222; Feb. 9.
Air conditioning apparatus. J. L. Ditzler. 2,310,843; Feb. 9.
Aircraft cabin. E. F. Burton. 2,310,573; Feb. 9.
Aircraft structure. C. Dornier. 2,310,765; Feb. 9.
Air filter system for motor and clutch units. O. H. Banker. 2,310,203; Feb. 9.
Alkyl esters, Preparation of. E. R. Gilliland. 2,310,283; Feb. 9.
Alkylated phenols, Production of. W. W. Weinrich and E. J. Loew. 2,310,663; Feb. 9.
Alloy. L. H. F. Canac and E. A. M. A. Segol. 2,310,214; Feb. 9.
Alloy. R. L. Morrison. 2,310,308; Feb. 9.
Alloy and dental article. C. Dietz. 2,310,732; Feb. 9.
Ammonium compound, Quaternary. J. C. Sauer. 2,310,873; Feb. 9.
Amplifier circuits, Band-pass. N. M. Rust, J. D. Brailsford, and E. F. Goodenough. 2,310,910; Feb. 9.
Amusement and educational device. F. J. Manhart. 2,310,800; Feb. 9.
Anode. M. G. Whitfield. 2,310,561; Feb. 9.
Antenna. N. E. Lindenblad. 2,310,853; Feb. 9.
Antenna coupling and tuning system for communication or broadcast receivers. J. W. Sharp. 2,310,323; Feb. 9.
Antenna coupling and tuning system for communication or broadcast receivers. C. W. Wandrey. 2,310,720; Feb. 9.
Antiskid appliance. E. P. Schwab. 2,310,467; Feb. 9.
Anvil for stapling machines. E. Krantz. 2,310,530; Feb. 9.
Apparatus for burning liquid fuel. R. W. Beckett. 2,310,274; Feb. 9.
Apparatus for comparing the rates of regularly recurring impulses. E. Norrman. 2,310,706; Feb. 9.
Apparatus for distributing insecticides and germicides. H. W. Brown. 2,310,895; Feb. 9.
Apparatus for drawing and straightening wire stock. F. W. Gaines, 3rd, and W. A. Ehlert. 2,310,916; Feb. 9.
Apparatus for driving pins in bedposts. E. B. Hubbard. 2,310,638; Feb. 9.
Apparatus for dyeing threads or yarns for textile machines and the like. H. H. Denhof. 2,310,764; Feb. 9.
Apparatus for effecting smokeless combustion. S. Wikarski. 2,310,903; Feb. 9.
Apparatus for handling glass tubing. J. Morrison. 2,310,537; Feb. 9.
Apparatus for making laminated strips. U. C. Haren and J. P. Sapp. 2,310,851; Feb. 9.
Apparatus for manufacturing frozen confections. L. D. Overland. 2,310,256; Feb. 9.
Apparatus for operating on wire stock. F. W. Gaines and W. A. Ehlert. 2,310,914; Feb. 9.
Apparatus for producing animated pictures. E. Nassour. 2,310,254; Feb. 9.
Apparatus for the production of molded articles. H. M. Dodge. 2,310,404; Feb. 9.
Apparatus for treating metal articles. R. F. Arnoldy. 2,310,384; Feb. 9.
Aromatic vinyl compounds, Production of. G. Daumiller and G. Hoffmann. 2,310,762; Feb. 9.
Asparagus processing machine. W. J. Emmons and B. S. Gallagher. 2,310,358; Feb. 9.
Asphalt or resin shipping container. O. K. Schmied. 2,310,712; Feb. 9.
Aspirator device for smoke and airing conduits. L. Petrovich. 2,310,909; Feb. 9.
Attachment for milling machines to facilitate precision reproduction or duplication of articles or templates. C. D. Rieper. 2,310,373; Feb. 9.
Audiometer. M. Mages. 2,310,588; Feb. 9.
Automatic cutoff valve. S. T. Howard. 2,310,636; Feb. 9.
Automatic weighing machine. A. B. Gibson. 2,310,689; Feb. 9.
Automobile direction indicator. G. Kryl. 2,310,793; Feb. 9.
Automobile heater. W. G. Mitchell and A. P. Hultgren. 2,310,453; Feb. 9.
Automobile tire force pump. O. J. Allison. 2,310,565; Feb. 9.
Axle puller. H. C. Christian. 2,310,615; Feb. 9.
Backflow in plumbing systems, Preventing. J. T. and R. L. Lohman. 2,310,586; Feb. 9.
Bag: *See*—
Urinal bag.
Bag clamp. C. E. Anderson. 2,310,827; Feb. 9.
Bandage, Surgical. L. M. Pegg. 2,310,864; Feb. 9.
Barbwire, Reverse twist. H. A. Nelson. 2,310,668; Feb. 9.
Barometric regulator. M. W. Crew and J. W. Meyer. 2,310,678; Feb. 9.
Barrel head, Double bead. W. H. Veeneman. 2,310,885; Feb. 9.
Batch charger. B. Noble. 2,310,592; Feb. 9.
Battery charger. J. C. Knight. 2,310,700; Feb. 9.
Battery control, Thermostatic storage. F. S. Callender. 2,310,514; Feb. 9.
Biscuit cutting device. B. R. Edwards. 2,310,224; Feb. 9.
Bit: *See*—
Drill bit.
Bite rims or blocks, Registering. A. Fischer. 2,310,360; Feb. 9.
Blade, Grader. A. B. Clinkscales, Jr. 2,310,396; Feb. 9.
Blast cleaning apparatus. R. W. Guite. 2,310,488; Feb. 9.
Boat. R. M. Woods. 2,310,380; Feb. 9.
Boats, System and apparatus for propelling. C. R. Ford. 2,310,361; Feb. 9.
Bombing, Simulating. A. Briechle, R. T. Hurley, and G. E. Merritt. 2,310,613; Feb. 9.
Bottle and nipple guard, Nursing. D. G. Chester. 2,310,515; Feb. 9.
Bottle cap and closure. B. P. Lasky. 2,310,299; Feb. 9.
Bottle, Drop-counting. P. Giavotto. 2,310,777; Feb. 9.
Box: *See*—
Display box. Shuttle box.
Bracket: *See*—
Mirror and bracket.
Bracket. J. Galamb. 2,310,416; Feb. 9.
Brake: *See*—
Rotor brake.
Brake mechanism. J. Mercier. 2,310,802; Feb. 9.
Brake mechanism for motor driven electric switches and the like, Friction. P. B. Hoye. 2,310,787; Feb. 9.
Brush making. J. B. Jones and A. L. Le Febvre. 2,310,897; Feb. 9.
Building unit, Composite. E. H. Haux. 2,310,432; Feb. 9.
Burner means, especially for glass-making furnaces or tanks. V. Mulholland. 2,310,704; Feb. 9.
Bushing tool. C. E. Johnson, Jr. 2,310,639; Feb. 9.
By-pass type liner hanger. E. Burns. 2,310,572; Feb. 9.
Cab for fireless locomotives. P. Gilli. 2,310,778; Feb. 9.
Cabinet: *See*—
Sterilizing cabinet.
Cable clamp. V. E. Juslin and J. P. Carlevaro. 2,310,440; Feb. 9.
Cable terminal. F. G. Cox. 2,310,201; Feb. 9.
Calculating machine. C. M. F. Friden. 2,310,280–1; Feb. 9.
Calendar roll for carding machines, Compression. J. P. Garrett, Sr. 2,310,581; Feb. 9.
Camera. G. P. Grover. 2,310,850; Feb. 9.
Camlike control apparatus, Adjustable. B. Edelman. 2,310,357; Feb. 9.
Can opener. B. L. Brynjolfsson. 2,310,210; Feb. 9.
Car: *See*—
Elevator car. Railway car.
Carriage control mechanism. R. E. Hart. 2,310,430; Feb. 9.

Carriage type weight indicator. H. A. Raphael. 2,310,597; Feb. 9.
Carrier: *See*—
Sound record carrier.
Carton and tray therefor. R. S. Sanford. 2,310,464–6; Feb. 9.
Cartridge, Blasting. J. Barab. 2,310,343–4; Feb. 9.
Case: *See*—
Display case.
Catalytic conversion apparatus. F. M. McMillan 2,310,907; Feb. 9.
Cathode-ray tube. E. Schantl and M. Messner. 2,310,811; Feb. 9.
Cell cover with electrolyte control. M. Shank. 2,310,656; Feb. 9.
Cellular bodies, Manufacture of. W. Owen. 2,310,457; Feb. 9.
Cellular slab. P. E. Knudsen. 2,310,442; Feb. 9.
Cellulose derivatives, Producing. R. S. Bley. 2,310,729; Feb. 9.
Cement spraying unit. C. C. Bell. 2,310,205; Feb. 9.
Ceramic heating element and gas heater embodying the same. R. A. Dudley. 2,310,406; Feb. 9.
Ceramic ware, Firing. A. H. Fessler and A. P. Watts 2,310,578; Feb. 9.
Chain: *See*—
Tire chain.
Chair: *See*—
Collapsible chair: Posture chair.
Driver's chair.
Chair. E. T. Todd. 2,310,476; Feb. 9.
Chassis frame suspension. R. L. Wimbish. 2,310,821, Feb. 9.
Check. L. B. Case. 2,310,394; Feb. 9.
Check, Multiple. E. A. Wilbanks. 2,310,332; Feb. 9.
Check valve for door closers. J. F. Voelkel. 2,310,902; Feb. 9.
Cheese cutting machine. J. A. Marquis and A. G. Stephenson. 2,310,248; Feb. 9.
Chemical liquid pressure injector. E. W. Dodge. 2,310,576; Feb. 9.
Chimney or ventilation cowl. O. Back. 2,310,828; Feb. 9.
Chuck. A. J. Franke. 2,310,580; Feb. 9.
Chute for ammunition and other articles. H. Trevaskis 2,310,884; Feb. 9.
Chute, Expansible. G. A. Mashon. 2,310,251; Feb. 9.
Cigar bunch separating mechanism. J. F. Halstead 2,310,489; Feb. 9.
Cigar lighter. H. G. Lehmann. 2,310,701; Feb. 9.
Cigarette making machine. S. Krasnow and W. Edelberg. 2,310,297; Feb. 9.
Circuit: *See*—
Frequency variation compensation circuit. Ultra short wave amplifier circuit.
Two-way trunk circuit.
Circuit arrangement with secondary emission electron multipliers. K. Thom. 2,310,883; Feb. 9.
Circuit breaker. T. Lindstrom and J. Sandin 2,310,854; Feb. 9.
Circuit controller. W. L. Butler and G. M. Hausler 2,310,730; Feb. 9.
Circuit interrupter. E. H. Hall and R. H. Lietzel. 2,310,779; Feb. 9.
Clamp: *See*—
Bag clamp. Surface gauge clamp.
Cable clamp.
Clamp. H. U. Ransom and L. G. Pynn. 2,310,708; Feb. 9.
Cleaner: *See*—
Air cleaner.
Cleaning machine. J. J. O'Brien and J. Strad 2,310,541; Feb. 9.
Clinch-on nut and method of manufacture. H. G. Renner. 2,310,316; Feb. 9.
Clip: *See*—
Paper clip.
Closing ring. A. H. Van Horn. 2,310,901; Feb. 9.
Coating composition. E. C. Pitman. 2,310,867; Feb. 9.
Coating on magnesium and its alloys, Coloring protective. H. K. De Long. 2,310,487; Feb. 9.
Coin chute. F. A. Hoyt. 2,310,637; Feb. 9.
Coin chute. W. Patzer and W. A. Tratsch. 2,310,596; Feb. 9.
Coke from stills, Process and apparatus for removing. P. W. Pearson. 2,310,748; Feb. 9.
Coking and catalytic cracking process, Combination. J. K. Roberts. 2,310,317; Feb. 9.
Collapsible chair. A. B. Bell. 2,310,345; Feb. 9.
Colorimeter. A. H. Bennett and R. S. Estey. 2,310,608; Feb. 9.
Colorimeter. R. S. Estey and K. W. Harper. 2,310,624; Feb. 9.
Combined-harvester, Self-propelled. C. E. Everett. 2,310,577; Feb. 9.
Communication system. W. H. T. Holden. 2,310,634; Feb. 9.
Compounds of the cyanine type, Production of. J. D. Kendall. 2,310,640; Feb. 9.
Concrete block molding machine. B. Brekke. 2,310,833; Feb. 9.
Concrete form. G. B. Bosco. 2,310,669; Feb. 9.
Condenser: *See*—
Gas condenser.
Conduit construction, Exhaust. A. Franz. 2,310,771; Feb. 9.
Conduit fastener. H. R. Ellinwood. 2,310,622; Feb. 9.
Connector: *See*—
Electrical connector.
Connector for tanks, Outlet. P. Sperry. 2,310,877; Feb. 9.
Container: *See*—
Asphalt or resin shipping container. Safety razor container.
Container. L. Ehrenfeld. 2,310,408; Feb. 9.
Container. D. E. Graham. 2,310,420; Feb. 9.
Container. H. D. Tompkins. 2,310,818; Feb. 9.
Container. G. P. Ziehmer, Jr. 2,310,271; Feb. 9.
Containers, Sealing. H. G. Allen. 2,310,382; Feb. 9
Continuous retort. McG. Cline. 2,310,215; Feb. 9.
Control device. F. B. Aubert. 2,310,504; Feb. 9.
Control device. J. A. Whittington. 2,310,562; Feb. 9.
Control system. D. R. Shouits and A. P. Mansfield. 2,310,713; Feb. 9.
Controller, Condition responsive. F. D. Joesting. 2,310,293; Feb. 9.
Converter. F. Koppelmann, H. Frass, and R. Penk. 2,310,792; Feb. 9.
Conveyer belt. P. W. Van Orden. 2,310,819; Feb. 9.
Conveyer-excavator. J. Harrington. 2,310,233; Feb. 9.
Cooking food by electric conductance. E. L. Griffith. 2,310,690; Feb. 9.
Cooler: *See*—
Sand cooler.
Cord assembly, particularly for parachutes. D. E. L. Finlayson and L. Latham. 2,310,359; Feb. 9.
Corrosion resistant coating for metal surfaces. G. W. Jernstedt. 2,310,239; Feb. 9.
Corrugator. H. B. Greenwood. 2,310,421; Feb. 9.
Coupling: *See*—
Flexible coupling.
Coupling. W. A. Melsom. 2,310,250; Feb. 9.
Coupling. W. A. Melsom. 2,310,490; Feb. 9.
Cover construction. A. E. Cole. 2,310,398; Feb. 9.
Cream separator. R. O. Eastin. 2,310,355; Feb. 9.
Cup for bottle and can caps, Sanitary concealed. H Molow. 2,310,491; Feb. 9.
Current amplifiers, Balance direct and alternating. M Artzt. 2,310,342; Feb. 9.
Current tachometer, Directionally responsive alternating. R. Buch and F. Haemmerling. 2,310,511; Feb. 9.
Cutoff device. C. Dice. 2,310,403; Feb. 9.
Cutter: *See*—
Flock cutter. Paper cutter.
Cutting tool. A. Forberg. 2,310,579; Feb. 9.
Cyclic operations, Control of. R. C. Lassiat. 2,310,244, Feb. 9.
Cylinder adjuster for threshing machines. M. J. Gauss 2,310,282; Feb. 9.
Damper controller. J. E. Haines, G. F. Laing, and S. W. Nickells. 2,310,364; Feb. 9.
Damping and cushioning arrangement for measuring instruments. J. A. Widmer. 2,310,503; Feb. 9.
Deck, Portable. G. G. Greulich. 2,310,426–7; Feb. 9.
Deep well screen. C. E. Bodey, Jr. 2,310,507; Feb. 9.
Deflector for grain. E. F. Bissell. 2,310,610; Feb. 9.
Delinter. J. B. Ricker. 2,310,598; Feb. 9.
Dental apparatus. H. H. Leib. 2,310,448; Feb. 9.
Dental burr and hand-piece assembly. M. M. Ellman. 2,310,409; Feb. 9.
Detachable bits and the like and apparatus therefor, Forging and refinishing. G. E. Boyce. 2,310,675; Feb. 9.
Device for fabricating pump impellers. W. H. Curtis. 2,310,841; Feb. 9.
Device for reducing eddy current losses in stator end plates. P. Waldvogel. 2,310,501; Feb. 9.
Dextran, Making. G. L. Stahly. 2,310,263; Feb. 9.
Diary, notebook, and the like. W. K. Petrie. 2,310,707; Feb. 9.
Die: *See*—
Sectional die.
Dies for making leather belt parts, Cutting. J. Raggi. 2,310,808; Feb. 9.
Diesel fuels, Treating. P. Miller and E. Lieber. 2,310,306; Feb. 9.
Digesters, Method of and apparatus for controlling. W. W. Frymoyer. 2,310,415; Feb. 9.
Diolefins, Preparing. W. Reppe, A. Steinhofer, and G. Daumiller. 2,310,809; Feb. 9.
Diolefins, Production of. H. P. A. Groll, G. W. Hearne, and G. E. G. von Stietz. 2,310,523; Feb. 9.
Dispenser: *See*—
Single roll tape dispenser.
Dispenser. G. W. Glann. 2,310,848; Feb. 9.
Dispensing device for beverages. O. Pivert. 2,310,313; Feb. 9.
Display box. E. Lux. 2,310,641; Feb. 9.
Display case. M. K. Teach. 2,310,718; Feb. 9.
Display device for typewriters. T. J. Watson. 2,310,482; Feb. 9.
Distillation process and apparatus. H. L. Cox and A. C. Plewes. 2310,399; Feb. 9.
Domestic appliance. G. C. Pearce. 2,310,543; Feb. 9.
Door: *See*—
Railway car grain door.
Door latch. J. H. Roethel. 2,310,548–50; Feb. 9.
Door or window holder. C. E. Fuller. 2,310,688; Feb. 9.
Doughnuts, Method of and apparatus for making ball. L. E. Russell. 2,310,463; Feb. 9.

Drawer with tilting back wall. C. W. Straubel. 2,310,879; Feb. 9.
Drill bit. M. Hokanson. 2,310,288–9; Feb. 9.
Drill with adjustable head. I. C. Clawson. 2,310,759; Feb. 9.
Drive system for process photography. W. F. Arndt. 2,310,339; Feb. 9.
Driver's chair. A. B. Bell. 2,310,346; Feb. 8.
Dry flotation, and media and apparatus therefor. J. A. Brusset. 2,310,894; Feb. 9.
Drying apparatus and method. D. D. Peebles. 2,310,650; Feb. 9.
Dusting machine. E. R. Dye. 2,310,620; Feb. 9.
Dynamoelectric machine. R. Gold. 2,310,422; Feb. 9.
Dynamoelectric machines, Ventilation of. G. Soldner. 2,310,470; Feb. 9.
Eccentric, Adjustable. S. I. Bousman. 2,310,209; Feb. 9.
Educational and display device. C. O. Johnston. 2,310,738; Feb. 9.
Educational device. R. B. Johnson. 2,310,437; Feb. 9.
Electric circuit breaker. P. Bartlett. 2,310,728; Feb. 9.
Electric circuit breaker. C. Thumim. 2,310,755; Feb. 9.
Electric knife with changeable points. W. A. Draeger. 2,310,844; Feb. 9.
Electric lighting apparatus. E. B. Moss. 2,310,743; Feb. 9.
Electric regulating system. F. Menzel. 2,310,857; Feb. 9.
Electric seam welding machine. G. F. Strong. 2,310,557; Feb. 9.
Electric translating apparatus. H. W. Lord. 2,310,741; Feb. 9.
Electric welding machine. G. F. Strong. 2,310,556; Feb. 9.
Electrical apparatus. H. M. Wolfson. 2,310,335; Feb. 9.
Electrical connector. S. N. Buchanan. 2,310,212; Feb. 9.
Electrical cooker. E. F. Whitchurch. 2,310,723; Feb. 9.
Electrical dust-precipitator indicating system. R. L. Hildebrand. 2,310,786; Feb. 9.
Electrical exploration of geological strata. E. E. Blondeau. 2,310,611; Feb. 9.
Electrical heating unit. J. E. Smith. 2,310,325; Feb. 9.
Electrical musical instrument. J. M. Hanert. 2,310,429; Feb. 9.
Electrical switching apparatus. A. R. Blandford. 2,310,905; Feb. 9.
Electrode spacer. C. P. Vogel. 2,310,662; Feb. 9.
Electrolyte paste, Making. R. Müller and H. Lee. 2,310,861; Feb. 9.
Electromagnetic horn antenna. M. Katzin. 2,310,294; Feb. 9.
Electronic beacon modulator. A. Alford. 2,310,202; Feb. 9.
Electronic television transmitter. W. Heimann. 2,310,782; Feb. 9.
Electronic tube. W. W. Eitel and J. A. McCullough. 2,310,769; Feb. 9.
Elevator car. H. E. Fritzam and M. J. Brounn. 2,310,414; Feb. 9.
Emulsion for treating textiles. F. G. La Piana and H. S. Bosland. 2,310,795; Feb. 9.
Endless conveyer. J. P. Morgan. 2,310,646; Feb. 9.
Engine: *See*—
Internal combustion engine.
Rotary engine.
Supercharged, compression-ignition, internal combustion engine.
Engine mount, Resilient. E. S. Taylor. 2,310,882; Feb. 9.
Engine plant with at least two crankshafts, Internal combustion. E. Waeber. 2,310,269; Feb. 9.
Equipment for permanently waving hair. R. M. Keele. 2,310,295; Feb. 9.
Erection means for filing material support. C. W. Straubel. 2,310,264; Feb. 9.
Evaporating apparatus. D. D. Peebles. 2,310,649; Feb. 9.
Evaporator. B. C. Johnson. 2,310,906; Feb. 9.
Excavator. J. O. Greer. 2,310,735; Feb. 9.
Extrusion press. H. M. Gersman. 2,310,230; Feb. 9.
Fabric treatment. H. D. Learnard, N. A. Sykes, and A. R. Wachter. 2,310,245; Feb. 9.
Fabrics, Printing upon. M. W. Johnson. 2,310,436; Feb. 9.
Fastener: *See*—
Conduit fastener.
Slide fastener.
Strap and fastener.
Fastening and locating device. C. T. Langmaid. 2,310,532; Feb. 9.
Fastening device for windows. J. Blears. 2,310,348; Feb. 9.
Fastening means. G. A. Tinnerman. 2,310,756; Feb. 9.
Fats and oils, Isomerization of. W. R. Eipper. 2,310,225; Feb. 9.
Faucet. N. Roach. 2,310,599; Feb. 9.
Faucet. A. A. Wyckoff. 2,310,485; Feb. 9.
Feed stop. R. L. Wilcox. 2,310,823; Feg. 9.
Ferrous bearing metals, Treatment of. J. C. Zimmer and A. J. Morway. 2,310,381; Feb. 9.
Fertile from infertile eggs, Method and apparatus for selecting. W. D. Dooley. 2,310,682; Feb. 9.
Filament and the like, Artificial. R. O. Denyes. 2,310,221; Feb. 9.
Fillerstractor. H. W. Longdin. 2,310,450; Feb. 9.
Film marking system. W. F. Arndt. 2,310,340; Feb. 9.
Firearm. O. Horsrud. 2,310,238; Feb. 9.
Fire escape. P. L. Newbold. 2,310,705; Feb. 9.
Fire extinguishing method and means. G. Schaaf. 2,310,552; Feb. 9.
Fishing reel. C. E. Sanborn. 2,310,654; Feb. 9.
Flat strips, Rolling of. D. A. Eberhardt. 2,310,356; Feb. 9.
Flexible coupling. W. C. Tyler. 2,310,329; Feb. 9.
Flock cutter. A. Hauge. 2,310,235; Feb. 9.
Flock cutting machine. A. Hauge. 2,310,236; Feb. 9.
Floor construction. A. G. Feldman. 2,310,734; Feb. 9.
Floor treating machine. R. K. Lewis. 2,310,302; Feb. 9.
Flow control valve. M. H. Grove. 2,310,628; Feb. 9.
Flue door shield. F. W. Hvoslef. 2,310,699; Feb. 9.
Fluid control device. G. H. Orr. 2,310,309; Feb. 9.
Fluid proportioning device. R. M. Potter. 2,310,459; Feb. 9.
Food broiler rack. S. N. Bobo. 2,310,349; Feb. 9.
Form liner. C. O. Crane and P. J. Mulligan. 2,310,400; Feb. 9.
Forming machine. R. S. Turton. 2,310,498; Feb. 9.
Free service coin-controlled machine. H. S. Benjamin. 2,310,206; Feb. 9.
Frequency modulation radio receivers. C. T. McCoy and P. M. Craig. 2,310,304; Feb. 9.
Frequency modulation receiver. G. E. Gustafson. 2,310,896; Feb. 9.
Frequency variation compensation circuit. N. Lea. 2,310,797; Feb. 9.
Fuel injection, Electromagnetically controlled. O. Fuscaldo. 2,310,773; Feb. 9.
Fuel supply and carbureting system for internal combustion engines. J. C. Lang. 2,310,739; Feb. 9.
Furnace wall maintenance. C. S. Hulton. 2,310,698; Feb. 9.
Furnaces, Reversing means for regenerative. V. D. Campbell and C. H. Wise. 2,310,392; Feb. 9.
Fuse construction. W. O. Schultz and A. G. Steinmayer. 2,310,466; Feb. 9.
Game. L. W. Freer. 2,310,686; Feb. 9.
Game. F. R. Labin and S. Szulist. 2,310,898; Feb. 9.
Garment. R. Manson. 2,310,855; Feb. 9.
Garment carrying folder. J. H. Vineberg. 2,310,499; Feb. 9.
Garment finishing and folding apparatus. J. W. Steele. 2,310,555; Feb. 9.
Gas analysis, Method of and apparatus for. A. C. Jenkins. 2,310,435; Feb. 9.
Gas analyzer. A. P. Sullivan. 2,310,472; Feb. 9.
Gas condensers. J. S. Haug. 2,310,234; Feb. 9.
Gas mixtures for catalytic processes, Preparation of. W. Herbert. 2,310,784; Feb. 9.
Gas welding table. J. E. Bales. 2,310,904; Feb. 9.
Gate: *See*—
Highway crossing gate.
Gears, Preloaded. C. B. Hale. 2,310,232; Feb. 9.
Gears, Producing. E. Wildhaber. 2,310,484; Feb. 9.
Generator: *See*—
Acceleration high frequency generator.
Square wave generator.
Steam generator.
Synchronized saw-tooth current generator.
Geochemical prospecting. L. Horvitz. 2,310,291; Feb. 9.
Geochemical prospecting. E. E. Rosaire. 2,310,318; Feb. 9.
Glass in plural charges, Feeding molten. W. T. Honiss. 2,310,290; Feb. 9.
Glass insulation unit. B. J. Dennison. 2,310,402; Feb. 9.
Glass making furnace or tank. V. Mulholland. 2,310,454; Feb. 9.
Glass, Method of and apparatus for feeding. L. D. Soubier. 2,310,715; Feb. 9.
Glass tubing, Manufacture of. H. F. Teichmann. 2,310,474; Feb. 9.
Glassware forming machine. J. W. Watt. 2,310,721; Feb. 9.
Glassware, Severing lengths of. H. H. Snyder. 2,310,469; Feb. 9.
Gooseneck for containers. G. H. Slaughter. 2,310,714; Feb. 9.
Grab. J. J. Racz. 2,310,869; Feb. 9.
Grain grader. G. E. Morse. 2,310,647; Feb. 9.
Grid construction. C. M. Wheeler. 2,310,822; Feb. 9.
Grille, Adjustable. R. S. Nelson and A. F. Wintercorn. 2,310,539; Feb. 9.
Guide and filler, Thermo model. E. I. Mintz. 2,310,912; Feb. 9.
Gummed bodies. F. W. Humphner. 2,310,292; Feb. 9.
Gyratory crusher. H. H. Rumpel. 2,310,601; Feb. 9.
Hair treating composition. G. Friedman and A. R. Goldfarb. 2,310,687; Feb. 9.
Handrail. S. E. Orlicki. 2,310,593; Feb. 9.
Hanger: *See*—
By-pass type liner hanger.
Heater: *See*—
Automobile heater.
Water heater.
Heating and refrigerating process and apparatus. R. Esnault-Pelterie. 2,310,520; Feb. 9.
Heating device. J. L. Mohun. 2,310,645; Feb. 9.
Heating system. P. S. Russel. 2,310,494; Feb. 9.
Heel-breasting machine. B. T. Leveque. 2,310,301; Feb. 9.

Highway crossing gate. J. E. Stephenson. 2,310,716; Feb. 9.
Highway crossing gate for railroads. W. S. Henry. 2,310,694; Feb. 9.
Hob. W. P. Adams. 2,310,826; Feb. 9.
Holder: *See*—
Door or window holder. Printing plate holder.
Nail holder. Reed holder.
Paper pencil holder. Tieback holder.
Holder for bottles, etc. G. G. Bridges and S. A. Miller, Jr. 2,310,390; Feb. 9.
Holder for screws and screw drivers, Combined. C. Hausbeck. 2,310,287; Feb. 9.
Horn for loud-speaker. P. W. Klipsch. 2,310,243; Feb. 9.
Hose coupling components, Connecting. W. A. Melsom. 2,310,536; Feb. 9.
Hosiery shaping device. A. E. Vaughan and A. E. Vaughn, Jr. 2,310,330; Feb. 9.
Hydrogenating with catalyst. G. C. Connolly. 2,310,278; Feb. 9.
Ice making apparatus and method. F. Short. 2,310,468; Feb. 9.
Ignition system for internal combustion engines. A. G. Cattaneo. 2,310,575; Feb. 9.
Illuminated sign. R. J. Robinson. 2,310,600; Feb. 9.
Image producer. J. C. Batchelor. 2,310,671; Feb. 9.
Impact member for impact crushers. E. Werner and K. Steinhart. 2,310,758; Feb. 9.
Impregnating agent for vegetable fibrous materials. L. Ritter. 2,310,257; Feb. 9.
Indestructible form for use in the production of inflatable seamless articles. R. R. Frissell. 2,310,362; Feb. 9.
Index directory. S. Widder and I. Weinger. 2,310,725; Feb. 9.
Indicator: *See*—
Automobile direction indicator. Carriage type weight indicator.
Indicator for clocks and watches. W. T. Jefferson. 2,310,582; Feb. 9.
Indicator for cooking stoves. C. M. Mayer. 2,310,900; Feb. 9.
Inductive winding. O. T. Farry. 2,310,684; Feb. 9.
Ingot mold. W. W. Schofield, W. Owen and J. Bidner. 2,310,553; Feb. 9.
Ingots, Method and device for casting plated. P. Brenner. 2,310,893; Feb. 9.
Inhaler. P. A. Derham and J. H. Newport, Jr. 2,310,681; Feb. 9.
Inhibitor for gasoline. R. H. Rosenwald and J. A. Chenicek. 2,310,710; Feb. 9.
Inhibitor, Surface-active incrustation. R. S. Bley. 2,310,207–8; Feb. 9.
Instrument for indicating the attitude and behaviour of aircraft in flight. T. W. Langley. 2,310,446; Feb. 9.
Internal combustion engine. C. A. Duke. 2,310,733; Feb. 9.
Internal combustion engine. A. E. Osborn. 2,310,542; Feb. 9.
Interpolymers of diallyl itaconate and ethyl methacrylate. G. F. D'Alelio. 2,310,731; Feb. 9.
Iron: *See*—
Malleable cast iron. Rustless iron.
Joint: *See*—
Pipe joint.
Knife. A. Paolantonio. 2,310,648; Feb. 9.
Ladder rig, Extensible. B. Klum. 2,310,441; Feb. 9.
Lamp attachment. R. J. Brandt. 2,310,509; Feb. 9.
Lamp fitting, Explosionproof. W. Nerlich. 2,310,456; Feb. 9.
Latch: *See*—
Door latch.
Lather machine. L. J. Wahl. 2,310,378; Feb. 9.
Lather making apparatus. L. J. Wahl. 2,310,379; Feb. 9.
Lathing machine. J. F. Buller. 2,310,512; Feb. 9.
Lawn rake. L. H. Semler and C. Rudolph. 2,310,322; Feb. 9.
Leakage of fluid through electric cables, Preventing. R. Gold. 2,310,423; Feb. 9.
Lifesaving cushion. H. S. Crabtree. 2,310,840; Feb. 9.
Lifter: *See*—
Valve lifter.
Lighting unit. R. E. Crossley. 2,310,618; Feb. 9.
Linear polymeric amidine salts. M. Hunt and J. E. Kirby. 2,310,789; Feb. 9.
Lipstick device. J. L. Younghusband. 2,310,726; Feb. 9.
Liquid fuel burning apparatus. J. A. Wilson and N. H. Sutterfield. 2,310,333; Feb. 9.
Liquid hardener solution. G. T. Eaton and J. I. Crabtree. 2,310,223; Feb. 9.
Liquid level control device. P. E. Kuhl and Francis R. Russell. 2,310,298; Feb. 9.
Liquid sprayer. W. H. Rose. 2,310,319; Feb. 9.
Liquids and washing gases, Process of and apparatus for degasifying. R. Becker. 2,310,829; Feb. 9.
Lister. W. H. Silver. 2,310,602; Feb. 9.
Loader, Front end. A. G. Gurries. 2,310,284; Feb. 9.
Loading device for relay armatures, Adjustable spring. T. A. Terjesen. 2,310,754; Feb. 9.
Lock: *See*—
Window sash lock.
Locomotive, Stoker fired. C. J. Surdy. 2,310,496; Feb. 9.
Lubricant composition. D. E. Badertscher, G. S. Crandall, and F. M. Seger. 2,310,670; Feb. 9.
Lubricants, Purifying. P. Miller and E. Lieber. 2,310,305; Feb. 9.
Lubrication feed for valves. A. S. Volpin. 2,310,480; Feb. 9.
Luminaire. T. W. Rolph. 2,310,810; Feb. 9.
Luminescent composition and producing the same. M. Goodman. 2,310,424; Feb. 9.
Luminescent light source and manufacture. H. W. Leverenz. 2,310,852; Feb. 9.
Luminescent product and method of producing the same. M. Goodman. 2,310,425; Feb. 9.
Luminescent screen. H. W. Leverenz. 2,310,863; Feb. 9.
Luminescent tube. E. C. Pitman. 2,310,866; Feb. 9.
Machine for making slide fasteners. F. Ulrich. 2,310,660; Feb. 9.
Machine for applying hood caps. J. F. Price. 2,310,868; Feb. 9.
Machine for checking quotient results. S. W. Dunwell and J. N. Wheeler. 2,310,407; Feb. 9.
Machine tool. H. N. Stephan. 2,310,878; Feb. 9.
Magazine closure for stapling machines. E. Krantz. 2,310,529; Feb. 9.
Magnetic bucket and conveying material. H. W. Kelly. 2,310,241; Feb. 9.
Magnetic core. E. G. Walters. 2,310,820; Feb. 9.
Magnitude of strains in rigid articles, Determining the. G. Ellis. 2,310,845; Feb. 9.
Mail holder, Portable. J. K. Burleigh and J. A. Weis. 2,310,835; Feb. 9.
Malleable cast iron. N. A. Ziegler and H. W. Northrup. 2,310,666–7; Feb. 9.
Manganese from ore, Recovering. E. Riveroll. 2,310,258; Feb. 9.
Manger. C. C. Callis. 2,310,200; Feb. 9.
Massaging device. M. M. Morrison. 2,310,804; Feb. 9.
Match package. J. de Ganahl. 2,310,219; Feb. 9.
Material for the production of multicolor photographs. B. Gáspár. 2,310,227; Feb. 9.
Materials, Joining. Z. J. Atlee and H. Brackney. 2,310,568; Feb. 9.
Measuring device. J.-G. Helmbold. 2,310,783; Feb. 9.
Meat trolleys, Treating. P. J. Lawson. 2,310,585; Feb. 9.
Mechanism for fighting tanks, Hook-on-and-release. A. E. Andersen. 2,310,887; Feb. 9.
Metacresol and paracresol, Separation of. F. E. Cislak and M. M. Otto. 2,310,616; Feb. 9.
Metal articles, Degreasing of. W. E. Booth. 2,310,569; Feb. 9.
Metal articles with molten metal and of preparing metal articles for hot coating, Coating. W. E. Marshall. 2,310,451; Feb. 9.
Metal fusing apparatus. R. K. Hopkins. 2,310,635; Feb. 9.
Metal shot, Forming. H. Marette. 2,310,590; Feb. 9.
Metals, Casting. J. Dornauf. 2,310,766; Feb. 9.
Metallurgical reactions regularly and rapidly, Effecting. R. Perrin. 2,310,865; Feb. 9.
Metalworking machine. M. H. Arms. 2,310,338; Feb. 9.
Methylamines, Treatment of. W. Tyerman. 2,310,478; Feb. 9.
Mills, Lubricating cold reducing. W. P. Wilke, III, and De M. M. Erskine. 2,310,563; Feb. 9.
Mineral fortification of foodstuffs and medicinal products. J. S. Andrews, L. H. Evans, and L. J. Huber. 2,310,383; Feb. 9.
Mining machine, Kerf-cutting. T. E. Pray. 2,310,314; Feb. 9.
Mirror and bracket, Rear view. A. B. Dettmer. 2,310,353; Feb. 9.
Modulating system. D. B. Smith. 2,310,324; Feb. 9.
Mold: *See*—
Ingot mold.
Mold. P. M. Mueller. 2,310,805; Feb. 9.
Mold lining, Absorptive. A. E. Brooks and B. W. Bender. 2,310,391; Feb. 9.
Molded stem. C. A. Horn. 2,310,237; Feb. 9.
Molding apparatus for open type cushions. G. W. Blair and J. F. Schott. 2,310,830; Feb. 9.
Molding, Blind. C. J. Davies and A. C. Lind. 2,310,763; Feb. 9.
Mop. A. A. Bohnenblust. 2,310,508; Feb. 9.
Motor: *See*—
Variable speed motor. Windshield wiper motor.
Water motor.
Motor driven cream separator, Portable. C. R. Stout. 2,310,814; Feb. 9.
Motor fuel. W. H. Smyers and T. Cross, Jr. 2,310,376; Feb. 9.
Motor fuel, Production of. W. J. Sweeney. 2,310,327; Feb. 9.
Motor tractor. T. Gavagnin. 2,310,775; Feb. 9.
Motor vehicle. J. R. Ferguson. 2,310,410; Feb. 9.
Mount for long wave quartz crystals. H. Bremer and F. Krones. 2,310,612; Feb. 9.
Mowing machine. J. I. Blair and H. Imbt. 2,310,387; Feb. 9.
Mowing machine. J. I. Blair. 2,310,388; Feb. 9.
Multiple signals, Reducing. C. W. Hansell. 2,310,692; Feb. 9.
Multiplying device. R. B. Johnson. 2,310,438; Feb. 9.
Musical instrument. P. M. Barth. 2,310,606; Feb. 9.
Network distribution system. M. A. Bostwick. 2,310,832; Feb. 9.

Nitrocellulose to recover nitrating acids, Washing. F. Nessler. 2,310,862; Feb. 9.
Nozzle, Spray. J. O. Lewis. 2,310,798; Feb. 9.
Nozzle, Suction. A. W. Seyfried. 2,310,554; Feb. 9.
Numeral type face. M. Maul. 2,310,856; Feb. 9.
Oil seal. H. M. Dodge. 2,310,405; Feb. 9.
Oil, Treating pipeline. C. M. Blair, Jr. 2,310,673; Feb. 9.
Oils of high stability, Manufacturing. F. Schick. 2,310,812; Feb. 9.
Olefins, Hydration of. H. M. Guinot. 2,310,911; Feb. 9.
Optical objective. A. Warmisham. 2,310,502; Feb. 9.
Optical reflecting material. T. G. Jungersen. 2,310,790; Feb. 9.
Optical unit, Reflecting. A. M. Taylor. 2,310,817; Feb. 9.
Ores, Flotation of. W. E. Keck. 2,310,240; Feb. 9.
Organic compounds from coke oven by-products, Recovery of low-boiling. F. M. Thatcher, J. H. Wells, and P. J. Wilson, Jr. 2,310,659; Feb. 9.
Orthopedic applicance. F. E. Wyant. 2,310,824; Feb. 9.
Oscillating system. W. H. C. Higgins. 2,310,695; Feb. 9.
Oxide opacifier and making same, Zirconium. C. J. Kinzie. 2,310,242; Feb. 9.
Oxyalkylated lecithin and making same. M. D. Groote and B. Keiser. 2,310,679; Feb. 9.
Oxygen enrichment. J. G. M. Bullowa and H. D. Ratish. 2,310,277; Feb. 9.
Package, Match. G. D. Martin. 2,310,535; Feb. 9.
Padlocked slider for slide fasteners. M. Greene. 2,310,627; Feb. 9.
Paint brush rack. H. R. Lindell. 2,310,533; Feb. 9.
Palette. W. A. and I. M. Sillman. 2,310,752; Feb. 9.
Paper clip. W. J. Peterson. 2,310,458; Feb. 9.
Paper cutter. D. T. Helprin. 2,310,838; Feb. 9.
Paper feeding device. I. Ghertzmann. 2,310,418; Feb. 9.
Paper pencil holder. J. C. Hatfield. 2,310,632; Feb. 9.
Pessary. E. L. Younkins. 2,310,564; Feb. 9.
Pest control composition. J. F. Lontz. 2,310,799; Feb. 9.
Petroleum distillation. J. H. Carpenter, R. B. Kennedy, and H. J. McClanahan. 2,310,837; Feb. 9.
Petroleum hydrocarbons, Polymerizing and cracking. W. T. Hancock. 2,310,630; Feb. 9.
Phonographic chip remover. E. A. Beebe. 2,310,275; Feb. 9.
Photograph album. I. Weinger. 2,310,722; Feb. 9.
Photographic colloids, Manufacture of. B. Gáspár. 2,310,228; Feb. 9.
Photographic material containing envelope. F. H. Lines and R. W. Towle, Sr. 2,310,371; Feb. 9.
Photographic materials, Manufacture of. B. Gáspár. 2,310,226; Feb. 9.
Photo voltaic cell. C. W. Hansell. 2,310,365; Feb. 9.
Pickup device for airplanes. W. Howell. 2,310,697; Feb. 9.
Pin setting apparatus. W. A. Davis. 2,310,218; Feb. 9.
Pinion application of power, Double. De V. V. Carter. 2,310,393; Feb. 9.
Pipe: *See*—
Smoking pipe.
Pipe handling equipment. M. M. O'Connell. 2,310,255; Feb. 9.
Pipe joint. A. E. Osborn. 2,310,744; Feb. 9.
Pipe tong. C. A. Lundeen. 2,310,246; Feb. 9.
Piston packing device. W. Cords. 2,310,352; Feb. 9.
Piston ring assembly. H. P. Phillips. 2,310,311; Feb. 9.
Planter, Corn. P. L. Newbold. 2,310,540; Feb. 9.
Plastic fan stand. A. F. Fukal. 2,310,772; Feb. 9.
Plow point. J. M. Zwaska. 2,310,336; Feb. 9.
Plow, Rock rooter. J. R. Horrigan. 2,310,526; Feb. 9.
Pneumatic conveying apparatus. R. P. Sweeny. 2,310,265; Feb. 9.
Pneumatic ticket sending and receiving valve. E. W. Gent. 2,310,417; Feb. 9.
Polarimetric apparatus. R. S. Estey. 2,310,623; Feb. 9.
Pollution of atmospheres, Method and apparatus for studying the. A. C. Robertson. 2,310,871; Feb. 9.
Polymerization of acyclic terpenes in the presence of a phosphoric acid catalyst. A. L. Rummelsburg. 2,310,375; Feb. 9.
Post and insulator construction, Adjustable elevation. S. C. Miller. 2,310,803; Feb. 9.
Posture chair. F. B. Harman. 2,310,366; Feb. 9.
Pottery ware, Manufacture of. W. J. Miller. 2,310,859; Feb. 9.
Pottery ware, Method and apparatus for the manufacture of. W. J. Miller. 2,310,858; Feb. 9.
Poultry, Dressing. L. G. Swanson. 2,310,881; Feb. 9.
Power and transmission unit. H. N. Burns. 2,310,513; Feb. 9.
Power transmitting mechanism. J. I. Blair and H. Imbt. 2,310,386; Feb. 9.
Preset quantum and reset quantity counter. W. F. Berck. 2,310,347; Feb. 9.
Press: *See*—
Extrusion press.
Press. F. A. Brandes. 2,310,890; Feb. 9.
Pressure responsive device. P. J. Schwarzhaupt, K. A. Killam, and L. A. Taylor. 2,310,261; Feb. 9.
Primer for internal combustion motors. J. L. Osburn and W. H. Fain. 2,310,594; Feb. 9.
Printing forms, Inking. W. Hümmelchen. 2,310,788; Feb. 9.
Printing plate holder. S. J. Roesner. 2,310,547; Feb. 9
Printing press dampening roll control. G. Goebel and E. A. Wilckens. 2,310,363; Feb. 9.
Product produced from cellulose derivative material, Treating a. G. S. Adlington. 2,310,272; Feb. 9.
Projectile. R. T. Hurley. 2,310,915; Feb. 9.
Projector. J. E. Bancroft. 2,310,273; Feb. 9.
Propulsion mechanism. P. De Michelis. 2,310,220; Feb. 9.
Protective device. C. W. Kuhn and E. W. Seeger. 2,310,531; Feb. 9.
Protective system. H. R. Summerhayes. 2,310,753; Feb. 9.
Puller: *See*—
Axle puller.
Pump: *See*—
Automobile tire force pump.
Pump structure. J. F. Hoffer. 2,310,370; Feb. 9.
Pump surfaces, Protection of. D. van der M. Haarhoff. 2,310,629; Feb. 9.
Punchboard. O. L. Cartwright. 2,310,574; Feb. 9.
Purse seine. C. Ljubetich, D. Ljubetich, F. Boskovich, and A. Joncich. 2,310,702; Feb. 9.
Rack: *See*—
Adjustable rack. Paint brush rack.
Food broiler rack.
Radial drilling machine. V. Retterath. 2,310,870; Feb. 9.
Railway car. N. A. Thunstrom. 2,310,497; Feb. 9.
Railway car grain door. J. M. Moon. 2,310,860; Feb. 9.
Reamer locking device. E. D. Kennedy. 2,310,584; Feb. 9.
Record card, Perforated. W. Lang. 2,310,445; Feb. 9.
Recorder, Time. R. T. Blakely. 2,310,389; Feb. 9.
Rectifier, Dry-type. E. Kriebel. 2,310,444; Feb. 9.
Reed holder. W. Neuerburg. 2,310,908; Feb. 9.
Reel: *See*—
Fishing reel.
Reflector for cameras, View finder. K. W. Montgomery. 2,310,307; Feb. 9.
Refractory. J. C. McMullen. 2,310,591; Feb. 9.
Refrigerating apparatus, Multiple temperature. J. J. Shively. 2,310,657; Feb. 9.
Refrigeration. C. C. Coons and C. G. Puchy. 2,310,760; Feb. 9.
Refrigeration. G. P. Daiger. 2,310,761; Feb. 9.
Refrigeration. A. D. Siedle. 2,310,875; Feb. 9.
Refrigeration apparatus. R. H. Tull. 2,310,477; Feb. 9.
Refrigerator. T. W. Rundell. 2,310,872; Feb. 9.
Register mechanism. P. Knopf. 2,310,296; Feb. 9.
Register mechanism for indicating instruments. W. Leathers. 2,310,300; Feb. 9.
Regulating apparatus. W. H. Smith. 2,310,876; Feb. 9.
Regulating device. S. G. Eskin. 2,310,519; Feb. 9.
Regulating valve. R. B. Campbell. 2,310,677; Feb. 9.
Regulator: *See*—
Barometric regulator.
Relay. J. M. Wilson. 2,310,334; Feb. 9.
Resilient car wheel. T. Zintsmaster. 2,310,486; Feb. 9.
Resins from coal, Recovering. A. Nagelvoort. 2,310,492; Feb. 9.
Resins from fused urea. O. L. Kupfer. 2,310,794; Feb. 9.
Ring: *See*—
Closing ring.
Riveter, Compression. H. R. Fischer. 2,310,625; Feb. 9.
Riveting machine. K. Butter. 2,310,836; Feb. 9.
Roll adjustment, Pressure. A. F. Shields. 2,310,262; Feb. 9.
Rosin and rosin esters, Polymerization of. A. L. Rummelsburg. 2,310,374; Feb. 9.
Rotary engine. J. M. Reynolds. 2,310,653; Feb. 9.
Rotor brake. C. E. Tack and W. A. Helsten. 2,310,266; Feb. 9.
Roughing tool. C. G. Brostrom. 2,310,211; Feb. 9.
Rubber coating. P. L. Bush and D. E. Lovell. 2,310,676; Feb. 9.
Rubber panels, Manufacture of hard. E. R. Dillehay. 2,310,619; Feb. 9.
Rubbery material and making, Age resisting. I. E. Lightbown and J. G. McNab. 2,310,449; Feb. 9.
Rustless iron. W. B. Arness. 2,310,341; Feb. 9.
Safety razor container. G. A. Graham. 2,310,849; Feb. 9.
Sand cooler. W. H. Taylor. 2,310,603; Feb. 9.
Satin white and making the same. G. Haywood. 2,310,693; Feb. 9.
Saw filing machine. F. E. Collier. 2,310,517; Feb. 9.
Scabbard. E. L. Beckwith and C. P. MacIver. 2,310,204; Feb. 9.
Scale, Weighing. G. M. Richard. 2,310,493; Feb. 9.
Scale, Weighing. M. J. Weber and R. E. Vanderhoff. 2,310,560; Feb. 9.
Screen: *See*—
Deep well screen. Luminescent screen.
Screen structure, Double. O. C. Gruender. 2,310,736; Feb. 9.
Sectional die. W. F. Heller. 2,310,525; Feb. 9.

Self-cleaning switch. C. S. Packer. 2,310,595; Feb. 9.
Separator: *See*—
Cream separator.
Motor driven cream separator.
Sewing machine. C. F. Rubel. 2,310,320; Feb. 9.
Shaftless cone crusher and tilting member therefor. O. C. Gruender. 2,310,737; Feb. 9.
Shirt, Combination sport and dress. J. C. Leeds. 2,310,899; Feb. 9.
Shoe tree. E. Grau-Küpfer. 2,310,847; Feb. 9.
Shrinking textile fabrics. F. E. Mason. 2,310,664; Feb. 9.
Shuttle box. W. L. Hicks. 2,310,369; Feb. 9.
Sign: *See*—
Illuminated sign.
Sign. H. W. Williams. 2,310,665; Feb. 9.
Signal interrupting means for audiometers. M. Mages. 2,310,589; Feb. 9.
Signaling system. R. E. Ressler. 2,310,749; Feb. 9.
Single roll tape dispenser. D. L. Gorbatenko. 2,310,522; Feb. 9.
Skate. J. T. Enley. 2,310,683; Feb. 9.
Slide fastener. A. K. Berkner. 2,310,609; Feb. 9.
Smoking pipe. O Bastiansen. 2,310,385; Feb. 9.
Soap. R. Thomas and H. B. Oakley. 2,310,475; Feb. 9.
Sodium sulphate flotation. D. J. Pye. 2,310,315; Feb. 9.
Soil builder. C. Peter. 2,310,652; Feb. 9.
Solder, Brazing. M. M. Goldsmith. 2,310,231; Feb. 9.
Solenoid inlet valve. P. B. Parks and W. R. Peterson. 2,310,745; Feb. 9.
Solvent extraction of hydrocarbon materials. R. W. Henry and J. V. Montgomery. 2,310,524; Feb. 9.
Solvent saver. C. F. Dinley. 2,310,680; Feb. 9.
Sorting machine. H. E. Veit. 2,310,661; Feb. 9.
Sound record carrier. F. Rieber. 2,310,545; Feb. 9.
Sound reproducing-recording apparatus, Combined. P. S. Gay. 2,310,229; Feb. 9.
Spindle, Wharve-driven flier. G. S. Fraser. 2,310,685; Feb. 9.
Splint, Clavicle. R. Anderson. 2,310,566; Feb. 9.
Spraying apparatus. D. D. Heimburger. 2,310,633; Feb. 9.
Sprinkler, Lawn. R. W. Lappin. 2,310,796; Feb. 9.
Square wave generator. G. Swift. 2,310,328; Feb. 9.
Stabilizer. M. B. Briggs. 2,310,570; Feb. 9.
Stand: *See*—
Adjustable display stand.
Plastic fan stand.
Starch manufacturing process. A. Peltzer and A. Peltzer, Jr. 2,310,651; Feb. 9.
Steam generator. D. H. N. Mayo and A. E. Raynor. 2,310,801; Feb. 9.
Steel, Treating. L. F. McGlincy. 2,310,703; Feb. 9.
Sterilizing cabinet. W. L. Eckhardt. 2,310,768; Feb. 9.
Stock feed for automatic screw machines. H. W. Ruppel. 2,310,259; Feb. 9.
Stopper for pipes. W. J. Bowan and E. H. Fawley. 2,310,351; Feb. 9.
Strainer, Self-cleaning. G. L. MacNeil. 2,310,587; Feb. 9.
Strap and fastener, Combined. M. J. Hyman. 2,310,434; Feb. 9.
Stringed musical instrument. G. D. Beauchamp. 2,310,199; Feb. 9.
Structural unit. R. L. Swartwout. 2,310,326; Feb. 9.
Suction cleaning apparatus. C. H. Taylor. 2,310,268; Feb. 9.
Sulphur dioxide-olefin resins, Production of. M. M. Barnett. 2,310,605; Feb. 9.
Supercharged, compression-ignition, internal combustion engine. F. Marburg. 2,310,643; Feb. 9.
Supercharger regulating. F. Bielitz. 2,310,831; Feb. 9.
Support: *See*—
Telephone support.
Surface coverings, Making variegated hard. J. F. Summersgill. 2,310,495; Feb. 9.
Surface gauge clamp. W. F. Bilz. 2,310,276; Feb. 9.
Switch: *See*—
Self-cleaning switch.
Thermostatic switch.
Switch testing apparatus. J. H. Payne. 2,310,747; Feb. 9.
Switching system. L. A. Meacham and C. V. Parker. 2,310,452; Feb. 9.
Synchronized saw-tooth current generator. H. Bähring and T. Mulert. 2,310,888; Feb. 9.
Table: *See*—
Gas welding table.
Table. R. E. Goodman. 2,310,521; Feb. 9.
Tank: *See*—
Glass making furnace or tank.
Tank. H. Zerweck. 2,310,270; Feb. 9.
Tanks, Making pressure. G. E. Bullock. 2,310,834; Feb. 9.
Tar, Fractional distillation of. J. Zafertnik. 2,310,500; Feb. 9.
Target throwing apparatus. L. F. Parker and A. Hanger. 2,310,746; Feb. 9.
Telegraph system. C. A. Dahlbom and R. B. Hearn. 2,310,279; Feb. 9.
Telephone support. P. C. Moomaw. 2,310,252; Feb. 9.
Teletypewriter operation, Automatic. J. A. Hall and J. W. Schmied. 2,310,428; Feb. 9.
Television transmitting system. E. I. Anderson and A. Barco. 2,310,337; Feb. 9.
Television transmitting system. O. B. Hanson. 2,310,285; Feb. 9.
Tetraethyl lead, Producing. I. C. Nourse. 2,310,806; Feb. 9.
Thermoelectric cell. R. H. Deysher. 2,310,354; Feb. 9.
Thermostatic switch. A. D. Keene. 2,310,791; Feb. 9.
Throttle actuating device. G. A. Rubissow. 2,310,551; Feb. 9.
Thrust mechanism. E Svendsen. 2,310,473; Feb. 9.
Tieback holder. M. M. M. Davitt and J. E. M. Wendell. 2,310,842; Feb. 9.
Timing mechanism. A. R. Hutt. 2,310,527; Feb. 9.
Tire. V. B. Gay. 2,310,776; Feb. 9.
Tire chain. W. A. Pool. 2,310,807; Feb. 9.
Tire spreader. C. E. Branick. 2,310,891; Feb. 9.
Tobacco processing. S. Musher. 2,310,538; Feb. 9.
Tobacco supplying means for cigarette machines. C. F. Randolph. 2,310,460; Feb. 9.
Toggle press. H. C. Bostwick. 2,310,674; Feb. 9.
Tool: *See*—
Bushing tool.
Cutting tool.
Machine tool.
Roughing tool.
Toolholder for lathes. W. F. Groene. 2,310,691; Feb. 9.
Toothbrush, Motor driven. J. Gold. 2,310,626; Feb. 9.
Toothbrush pack. J. W. Brady. 2,310,571; Feb. 9.
Toy. V. C. Harris. 2,310,781; Feb. 9.
Toy, Mystery. E. S. Savage. 2,310,711; Feb. 9.
Traction device. C. P. Galanot and J. A. Watson, Jr. 2,310,846; Feb. 9.
Tractor. G. S. Allin. 2,310,727; Feb. 9.
Trailer. R. E. Hart. 2,310,431; Feb. 9.
Transformer. H. W. Lord. 2,310,742; Feb. 9.
Transmission, Automatic. J. B. Whitlow. 2,310,724; Feb. 9.
Transmission gearing. C. D. Peterson and E. J. Barth. 2,310,310; Feb. 9.
Tray and cage, Incubating and hatching. G. T. Markey. 2,310,534; Feb. 9.
Tube: *See*—
Cathrode-ray tube.
Electronic tube.
Luminescent tube.
Tube filling and sealing machine, Collapsible. J. H. Fridén. 2,310,413; Feb. 9.
Tuning device for radio receivers. R. Masllorens. 2,310,303; Feb. 9.
Turkey saddle. H. L. Abramson. 2,310,825; Feb. 9.
Two-way trunk circuit. B. A. Wallace. 2,310,481; Feb. 9.
Type tie-up. J. J. Riehl. 2,310,709. Feb. 9.
Typewriting machine. O. J. Sundstrand. 2,310,717; Feb. 9.
Ultra short wave amplifier circuit. J. Müller. 2,310,455; Feb. 9.
Undergarment. A. J. Harwood. 2,310,367; Feb. 9.
Undergarment, Man's. F. Chatfield and J. M. Lindh. 2,310,839; Feb. 9.
Upholstering material. C. Herrmann. 2,310,785; Feb. 9.
Urinal. L. Strite and G. U. Small. 2,310,658; Feb. 9.
Urinal bag. L. I. Blackburn and L. de Cordova. 2,310,505; Feb. 9.
Vacuum control of clutch capacity. J. Dolza. 2,310,518; Feb. 9.
Vacuum relief valve. D. F. Larson. 2,310,447; Feb. 9.
Valve: *See*—
Automatic cutoff valve.
Flow control valve.
Regulating valve.
Solenoid inlet valve.
Vacuum relief valve.
Valve. C. E. Branick. 2,310,892; Feb. 9.
Valve. G. H Clark 2,310,516; Feb. 9.
Valve. C. F. Johnson. 2,310,583; Feb. 9.
Valve. W. O. Teeters and D. B. Salmon. 2,310,558; Feb. 9.
Valve for filling spouts, Automatic shutoff. W. A. Hansen. 2,310,631; Feb. 9.
Valve for fuel injection systems. C. M. Bovard. 2,310,350; Feb. 9.
Valve lifter. H. L. Oserowsky. 2,310,372; Feb. 9.
Valve mechanism. W. T. Tabb. 2,310,913; Feb. 9.
Variable speed motor. M. Schiff. 2,310,874; Feb. 9.
Varnish. W. W. Ginn. 2,310,419; Feb. 9.
Vehicle: *See*—
Motor vehicle.
Velocity measuring device. C. L. Robinson. 2,310,546; Feb. 9.
Vending machine. E. H. Sargent and A. G. Alex. 2,310,321; Feb. 9.
Ventilator. R. A. Walker 2,310,331; Feb. 9.
Vertical conveyer system. S. L. G. Knox. 2,310,462; Feb. 9.
Vertical conveyer system. J. E. Regan and A. N. Klyver. 2,310,461; Feb. 9.
Vibration dampener W. B. Flanders. 2,310,412; Feb. 9.
Vibration translating means. C. P. Walker. 2,310,559; Feb. 9.
Vinyl esters of tertiary carboxylic acids. W. E. Hanford and W. E. Mochel. 2,310,780; Feb. 9.
Vinyl resin composition and articles of manufacture comprising same. L. Becker. 2,310,889; Feb. 9.
Vitamin preparation for parenteral administration. H. Vollmer. 2,310,479; Feb. 9.
Volatile metals, Recovery of. E. W. Steckel and G. T. Mahler. 2,310,471; Feb. 9.

Voltage regulating system. G. E. Hansell. 2,310,286; Feb. 9.
Vote counting machine. J. H. Randolph. 2,310,544; Feb. 9.
Vulcanizing apparatus. G. D. Marcy. 2,310,642; Feb. 9.
Wallboard. D. D. Crandell. 2,310,216–7; Feb. 9.
Wall construction. P. E. Knudsen and J. A. Desmone. 2,310,443; Feb. 9.
Wash fountain. M. Conner. 2,310,617; Feb. 9.
Washer: *See*—
Air and gas washer.
Washer seal, Rubber bonded split metal. D. E. Batesole. 2,310,607; Feb. 9.
Water feeder for boilers, Automatic. W. Homfeldt. 2,310,696; Feb. 9.
Water heater. H. S. Murphy. 2,310,253; Feb. 9.
Water motor. A. M. Taylor. 2,310,816; Feb. 9.
Water recovery device for airships. L. Durr. 2,310,767; Feb. 9.
Waters, Process and composition for purification and treatment of natural or sewerage. P. C. Schneider. 2,310,655; Feb. 9.
Wave length modulation. R. E. Schock. 2,310,260; Feb. 9.
Weatherstrip for doors and the like. T. M. Hester. 2,310,433; Feb. 9.
Weighing apparatus with overhead dial unit. O. S. Carliss. 2,310,614; Feb. 9.
Welding transformer. E. C. Wentz. 2,310,886; Feb. 9.
Well cementing apparatus. N. W. Wickersham. 2,310,483; Feb. 9.
Well pumps, Preventing pitting of. E. M. Wagner. 2,310,757; Feb. 9.
Wells, Packing. C. J. Coberly. 2,310,397; Feb. 9.
Welt mechanism for knitting machines. C. A. Hepp. 2,310,368; Feb. 9.
Wheel: *See*—
Resilient car wheel.
Wheel for marking machines, Type. O. B. Meyers. 2,310,644; Feb. 9.
Window. E. H. Lunken and G. A. Just. 2,310,247; Feb. 9.
Window closure. F. Beachy. 2,310,672; Feb. 9.
Window construction. R. H. Bliss. 2,310,506; Feb. 9.
Window construction unit. H. Edwards and R. B. Nelson. 2,310,621; Feb. 9.
Window sash lock. H. Philipsberg. 2,310,312; Feb. 9.
Window structure. O. L. and S. J. Dautrick. 2,310,401; Feb. 9.
Windshield wiper. A. C. Scinta. 2,310,751; Feb. 9.
Windshield wiper motor. S. Schnell. 2,310,750; Feb. 9.
Wiring fixture. H. W. Garbe and H. Saravalli. 2,310,774; Feb. 9.
Wood cutting machine. E. J. Zindrick. 2,310,604; Feb. 9.
Work guide for saw tables. G. J. Sellmeyer. 2,310,813; Feb. 9.
Worm. W. J. Stuber and J. J. Di Ienno. 2,310,880; Feb. 9.
Wrapping machine. H. B. Tuthill and H. F. Caldwell. 2,310,719; Feb. 9.
X-ray apparatus and construction. Z. J. Atlee and H. Brackney. 2,310,567; Feb. 9.

CLASSIFICATION OF PATENTS

ISSUED FEBRUARY 9, 1943

In view of the fact that the issue is being checked weekly by the Classification Division, the class and subclass in this list are correct as of this date. Where there is a discrepancy between the classification given in the patent head and the classification in this list, the classification of this list governs.

NOTE.—First number=class, second number=subclass, third number=patent number

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This list shows the correct classification of those patents wherein the classification given in the patent head has been changed.

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